# author index

Index of Issues: July, pp 1-160; August, pp 161-304; September, pp 305-456; October, pp 457-624; November, pp 625-792; December, pp 793-952. Page numbers beginning with S denote articles in the December Pathology Patterns Reviews.

Abbate, Rosanna, 56 Abe, Masafumi, 673 Abruzzo, Lynne V., 17, 410, 886 Aigner, Thomas, 271 Albitar, Maher, 437 Alexanian, Raymond, 543 Alkan, Serhan, 898 Alò, Piero L., 129 Al Saadi, Abdul, 41 Altini, Mario, 107 Altink, Renee, 831 ALTS Group, 386 Andreano, Tiziana, 129 Angelelli, Bruna, 729 Aquino, Deborah B., 204, 512 Arber, Daniel A., 25 Arbiser, Zoya K., 473 Argani, Pedram, 831 Asa, Sylvia L., 635 Ashfaq, Raheela, 495 Athanasiou, Evangelia, 535 Axelrod, Frederick B., 52 Azevedo, Jacinta, 581

### B

Bankl, Hans C., 97 Barbareschi, Mattia, 744 Barrans, Sharon L., 420 Barthels, Monika, 567 Bass, Randall D., 211, 550 Bassi, Deepa, 246 Baty, Darric E., 760 Beals, Theodore F., 898 Belghiti, Jacques, 738 Benevolo, Maria, 360 Benigni, Elisabetta, 489 Benz, Pat, 893 Bertram, Heidi C., 191 Boi, Sebastiana, 744 Boldorini, Renzo, 489

Bonetto, Sara, 770 Bonney, Erica N., 562 Bosari, Silvano, 721 Botti, Claudio, 129 Bovicelli, Alessandro, 729 Boyars, Michael C., 225 Braidotti, Paola, 721 Bralet, Marie-Pierre, 738 Brar, Shabneet, 576 Breitbart, Roger E., S97 Brenna, Alessia, 360 Brunelli, Tamara, 56 Brynes, Russell K., 211, 550 Bubendorf, Lukas, 79 Buckley, Patrick J., 893 Budde, Ulrich, 567 Bueso-Ramos, Carlos E., 34, 410, 543 Buglioni, Simonetta, 360 Burnett, Rodney A., 253 Büyükbabani, Nesimi, 341

Cameron, Gregory S., 760 Cameron, John L., 831 Canfield, William, 913 Carmel, Ralph, 576 Carroll, Karen C., 218 Cartagena, Norberto, 92 Castro, Rita R., 581 Ceccarelli, Claudio, 729 Cerilli, Lisa A., S65 Chan, Joel A., 550 Chan, Wing C., 506 Check, Irene J., 191 Cheung, Carol C., 635 Cheville, John C., 854 Chew, Karen, 234 Chhieng, David C., 709 Child, Anthony, 420 Chong, Yap-Yee, 665

Chow, Vivian, 240 Choy, Joe, 240 Christakis, John I., 535 Cibas, Edmund S., 331, 692 Cigala, Claudia, 721 Clemente, Claudio, 744 Coggi, Guido, 721 Cohen, Bruce H., 326 Colletti, Richard B., 753 Cosimelli, Maurizio, 360 Costa, Silvano, 729 Costanzi, Giulio, 770 Creer, Michael H., 396 Crisan, Domnita, 41 Cristiani, Paolo, 729 Crooke, Michael J., 354

## n

Dagis, Andrew, 25 D'Agnano, Igea, 360 Dalla Palma, Paolo, 744 Dalquen, Peter, 79 D'Amico, Frank, 816 D'Angelo, Carmen, 360 Danner, Barbara, 72 Dasgupta, Amitava, 403 Davis, Bruce H., 41 Dawson, D. Brian, 512, 648 Degott, Claude, 738 Delahunt, Brett, 354 Del Curto, Barbara, 721 DeLellis, Ronald A., 696 Demichelis, Francesca, 744 Demirkesen, Cuyan, 341 Derhagopian, Robert P., 92 Dessy, Enrico, 721 Deugnier, Yves, 263 Devaraj, Sridevi, \$108 Dietel, Manfred, 823 Dighe, Anand S., S123, S133 DiGiuseppe, Joseph A., 905

Di Tondo, Ugo, 129 Dlott, Jeffrey S., 760 Domiati-Saad, Rana K., 648 Donnorso, Raffaele Perrone. Donovan, Michael J., S97 Downie, Ian, 253 Dubois, Sylvie, 738 Duca, Piergiorgio, 770 Dunmire, Valerie, 17

## E

Eccher, Claudio, 744 Eilender, David, 168 Eisenbrey, Arthur B., 41 Eisert, Roswit, 567 Elliott, Peter J., 637 Emerson, Jane F., 879 Emerson, Scott S., 879 Erzén, Mojca, 729 Eulitz, Manfred, 135 Euscher, Elizabeth D., 336 Exposto, Filomena da L., 581

Fan. Sheung T., 838 Farkas, Amicur, 377 Fassas, Athanasios, 535 Favia, Gianfranco, 107 Fedi, Sandra, 56 Feinstein, Donald I., 211 Fernando, Leonor P., 562 Fietze, Ellen, 823 Fine, Miriam, 25 Finn, William G., 683 Folpe, Andrew L., 473 Forti, Stefano, 744 Fortunato, Mirella, 489 Foucar, Elliott, S5, S21, S34 Foucar, Kathryn, 665

Frankel, Wendy L., 336 Frater, John L., 655 Freeman, Jed L., 562 Frenkel, Eugene P., 495 Frouhar, Zohreh, 576 Fuller, Sheila G., 905

G Gal, Anthony A., 466 Gal, Rivka, 377 Galati, Gregorio M., 129 Galvis, Colleen O., 816 Gamallo, Carlos, 143 Ganser, Arnold, 567 Garino, Elena, 489 Gasser, Thomas C., 79 Genest, David R., 692 Gensini, Gian Franco, 56 Ginsburg, Geoffrey S., S97 Giusti, Betti, 56 Glassman, Armand, 543 Goggins, Michael, 831 Gokaslan, Sefik, 495 Goldstein, Neal S., 63, 246, 319,846 Gong, Jerald Z., 893 Gordon, Stuart C., 846 Gori, Andrea, 770 Gould, Edwin W., 92 Graziani, Daniela, 721 Grilli, Bruno, 79 Grzybicki, Dana M., 816 Guillygomarc'h, Anne, 263 Guyader, Dominique, 263

Haley, Barbara B., 495 Hammel, Jeffrey P., 655 Han, Xiang Y., 347 Hankin, Rebecca C., 41 Harper, Christina M., 253 Hayes, Kimberly, 543 Hecht, Jonathan L., 483 Helpap, Burkhard, 115 Hernandez, Antonio M., 550 Hillyard, David R., 218 Hindiyeh, Musa, 218 Hjelle, Brian, 665 Ho, Wai Kuen, 240 Hoda, Syed A., 696 Hojo, Hiroshi, 673 Holland, Paul V., 562 Horvatinovich, Joe, 893 Howanitz, Joan H., 311 Howanitz, Peter J., 311 Hrncic, Rudi, 135 Hruban, Ralph H., 831 Hsi, Eric D., 655 Huang, James Z., 506

Huh, Yang O., 437 Humphrey, Peter A., 864 Hunt, John P., 550 Hynan, Linda, 495 Hytiroglou, Prodromos, 535

Inwards, Carrie, 271 Jack, Andrew S., 420 Jacobs, Timothy J., 806 Jacobson, Kalen L., 347 Jamal, Saba, 512

Ichinoe, Masaaki, 369

Jialal, Ishwarlal, S108 Jilani, Iman, 437 Jones, Dan, 17, 410, 543 Juskevicius, Ridas, 331

Jhala, Nirag C., 709

Kadin, Marshall E., 527 Kallakury, Bhaskar V.S., 122 Kalogiannidis, Panagiotis, 535 Kaloutsi, Vassiliki, 535 Kaplan, David, 429 Karandikar, Nitin J., 204 Katzenberg, Marc, 913 Kaufmann, Olaf, 823 Kaul, Anita, 211 Keating, Michael J., 437, 886 Khan, Waqar A., 41 Khatib, Ghada, 168 Khong, T. Yee, 703 Kirchner, Thomas, 271 Ko, Ellen C., 709 Köllermann, Jens, 115 Kopko, Patricia M., 562 Koren, Rumelia, 377 Koss, Michael N., 466 Koster, Frederick, 665 Kostopoulos, Ioannis, 535 Kotoula, Vassiliki, 535 Kratz, Alexander, S133 Krause, Madeleine D., 799 Krisher, Karen, 648 Kroft, Steven H., 183, 204, 512, 811 Kugel, Valentina, 377 Kunicka, Jolanta, 913

Lager, Donna J., 854 Lagoo, Anand S., 893 Lai, Raymond, 17, 410, 543, 886

Kurokawa, Amy M., 336

Lam, King Yin, 240 Langzam, Leah, 377 Laposata, Michael, S123, S129, S133 Larson, Richard, 665 Latinovic, Ljiljana, 97 Lechner, Klaus, 97 Lee, Joyce M.F., 838 Lerner, Susan, 437 Lewandowska, Kristine, 429 Lewis, James S., Jr., 396 Lewis, Margaret E., 354 Lin, Pei, 34 Lipponen, Pertti, 729 Lipson, Steven M., 52 Long, P. Michael, 168 Lucas, Joel G., 336 Luthra, Rajyalakshmi, 17, 410

M MacMillan, Donna H., S129 Macy, Sallie D., 135 Magrane, Gregg, 234 Maiorano, Eugenio, 107 Malfetano, John H., 122 Malin, Michael, 913 Manning, John, 17 Mansoor, Adnan, 34, 543 Marchevsky, Alberto M., 466 Marcucci, Rossella, 56 Margraf, Linda R., 648 Martin, Scott A., 854 Martoni, Andrea, 729 Mat, Cem, 341 Match, Mark E., 52 Mattson, Joan C., 41 Mazzucco, Gianna, 489 McCabe, Melvina, 665 McCarron, Karen F., 655 McKenna, Robert W., 183, 204, 512 McMahon, James T., 326 Medeiros, L. Jeffrey, 17, 34, 410, 543, 886 Mendler, Michel H., 263 Mengs, Jörg, 823

Meyers, Jerry I., 116

Mikami, Tetuo, 369

Meyerson, Howard, 429

Mihatsch, Michael J., 79

Miklos, Andrew Z., 396

Miller, Lorraine K., 12

Miller, Michael L., 655

Mitomi, Hiroyuki, 369

Mohandas, Narla, 913

Moirand, Romain, 263

Mintz, Paul D., 802

Mills, Stacey E., S65, 463

Mohamed, Anwar N., 168

Milano, Michelangelo A., 191

Palacios, José, 143 Palutke, Margarita, 168 Panetta, Achille, 729 535

Molberg, Kyle H., 183 Monga, Guido, 489 Morcos, Mohib. 738 Moreno-Bueno, Gema, 143 Morgan, Gareth J., 420 Moskaluk, Christopher A., 7 Mottolese, Marcella, 360 Müller, Susanna, 271 Müller-Hermelink, Konrad, 550 Murphy, Charles L., 135 Mynderse, Lance A., 854

Nakamura, Naoya, 673 Nathwani, Bharat N., 550 Nebuloni, Manuela, 489 Ng, Irene O.L., 838 Ng, Matthew, 838 Nguyen, Kim U., 347 Niemann, Theodore H., 336 Niland, Joyce, 25

n O'Connor, Sheila J.M., 420 Offerhaus, G. Johan A., 831 Ogawa, Hirokazu, 760 Ohno, Toshiyuki, 506 Okayasu, Isao, 369 Omodeo-Zorini, Elisabetta, 489 Onciu, Mihaela, 886 Ordonez, Nelson G., 347

Owen, Roger G., 420

Papadimitriou, Constantine S., Parapia, Liakat A., 420 Park, Kwang Hwa, 506 Paz, Adrian, 377 Pepe, Guglielmina, 56 Pérez-Gallego, Lucía, 143 Peters, David, 893 Pettay, James, 655 Pham, Audrey S., 347 Piattelli, Adriano, 107 Picker, Louis J., 512 Pietra, Giuseppe G., 721 Pikula, Branko, 97 Pinkus, Geraldine S., 483 Pinkus, Jack L., 483 Pizer, Ellen S., 129 Poli, Daniela, 56 Poon, Ronnie T.P., 838 Prayson, Richard A., 326 Prieto, Emília S., 581

Pringle, Kevin C., 354 Prisco, Domenico, 56 Prondzinski, Mario von Depka, 567 Pullarkat, Vinod, 211

R

0

Raab, Stephen S., 631, 816 Rakozy, Christiane K., 168 Reese, David M., 234 Renshaw, Andrew A., 87, 92, 477, 692 Rezuke, William N., 905 Richards, Stephen J., 420 Ritter, Detlef G., 396 Ritter, Jon H., S65 Roberts, Fiona, 253 Rogers, Beverly Barton, 648 Roggeman, Sylvie, 872 Rollins, Sarah, 326 Rosai, Juan, 696 Rosales, Cecilia M., 34 Rosenthal, Nancy S., 177 Ross, Charles W., 683 Ross, Jeffrey S., S97, 122, 637 Roush, Karen S., 648

S

189

ologists

Saboorian, M. Hossein, 495 Saegusa, Makoto, 369 Saffer, Helene L., 437 Sahoo, Sunati, 696 Samorapoompichit, Puchit, 97 Samoszuk, Michael, 527, 550 Sampson, Sanford R., 377 Santini, Donatella, 729 Santo, Irene, 581 Sarrió, David, 143 Sasaki, Yoshikazu, 673 Sauter, Guido, 79 Schenkman, Randy H., 92 Scheuermann, Richard H., 648 Schiffman, Mark, 386 Schlette, Ellen, 886 Schmuth, Matthias, 72

Schnadig, Vicki J., 225 Schneppenheim, Reinhard, 567 Schnitt, Stuart J., 806 Schnitzer, Bertram, 683, 898 Schønau, Andreas, 770 Scott, Amy, 665 Sebastiani, Valeria, 129 Senocak, Mustafa, 341 Sepp, Norbert T., 72 Shah, Swati, 466 Shapiro, Joel L., 655 Shapiro, Phyllis, 913 Sheehan, Christine E., 122 Shen, Peter U.F., 905 Shepp, David H., 52 Sherburne, Bradford J., 905 Sherman, Mark E., 386 Shultz, Jana J., 709 Siddiqui, Momin T., 495 Sidoroff, Alexis, 72 Singleton, Timothy P., 683 Sletten, Knut, 135 Slovak, Marilyn L., 25 Small, Eric J., 234 Smith, Michael B., 225 Smythe, W. Roy, 347 Snyder, David S., 25 Söder, Stephan, 271 Soderberg, Britt L., S123, S129, S133 Sohn, Taylor A., 831 Solomon, Alan, 135 Solomon, Diane, 386 Soman, Anjina, 846 Stagliano, Nancy E., S97 Stevens, Eric C., 177 Stolte, Manfred, 716 Strauchen, James A., 12 Studt, Jan D., 567 Suárez, Asunción, 143 Sudilovsky, Daniel, 234 Suno, Anna, 489 Syrjänen, Kari, 729 Syrjänen, Stina, 729 Szczepiorkowski, Zbigniew M.,

Szyfelbein, Wanda M., 122

Tarrand, Jeffrey J., 347 Tascilar, Metin, 831 Taylor, James F., 396 Terris, Benoît, 738 Terzano, Patrizia, 729 Thomas, Maria, 319 Topar, Gerda, 72 Trainer, Thomas D., 753

Triplett, Douglas A., 760 Tso, Wai K., 838 Tubbs, Raymond R., 655 Turlin, Bruno, 263 Tüzün, Yalçin, 341

Tüzüner, Nükhet, 341 Tworek, Joseph A., 683

U Underhill, Jeanette, 63 Uzieblo, Alison, 246

Vago, Luca, 770 Valdez, Riccardo, 683 Valent, Peter, 97 Vamvakas, Eleftherios C., S47 Vasselli, Stefania, 360 Vega, Francisco, 17, 410 Versalovic, James, S133 Viale, Giuseppe, 107 Vieth, Michael, 716 Virgo, Katherine S., 396 Visca, Paolo, 129 Vo, Trieu D., 168 Vollmer, Robin T., 864

W

Wahed, Amer, 403 Waldman, Frederic M., 234 Wall, Jonathan, 135 Wang, Sijian, 495 Wang, Xiang, 760 Weber, Donna M., 543 Wei, William Ignace, 240

Weinstein, Lisa J., 483 Weisenburger, Dennis D., 506, Weiss, Deborah T., 135 Weiss, Sharon W., 473 Werger, Alice C., 703 Westermark, Per, 135 Whitbread, John A., 52 Wians, Frank H., Jr., 495 Wick, Mark R., S65 Wilentz, Robb E., 831 Williams, Susan S., 122 Williams, Teresa, 135 Wiltshire, Esko J., 354 Winberg, Carl D., 211 Winslow, Jeffrey L., 753 Woods, Gail L., 225

X

Xu, Yin, 183

Wooliver, Craig, 135

Wu, Grant, 506

Yanagisawa, Nobuyuki, 369 Yazici, Hasan, 341 Yeo, Charles J., 831 Yu, Lelia, 41 Yuen, Po Wing, 240

7

Zaman, Zahur, 872 Zelmanovic, David, 913 Zerbi, Pietro, 770 Zervas, Costas, 535 Zhao, Dandan, 760 Zhu, Dan, 527 Zou, Kelly H., 331 Zupi, Gabriella, 360

# title index

Index of Issues: July, pp 1-160; August, pp 161-304; September, pp 305-456; October, pp 457-624; November, pp 625-792; December, pp 793-952. Page numbers beginning with S denote articles in the December Pathology Patterns Reviews.

## ANATOMIC PATHOLOGY

#### **Case Reports**

Collagenous Gastritis: A Long-Term Follow-up With the Development of Endocrine Cell Hyperplasia, Intestinal Metaplasia, and Epithelial Changes Indeterminate for Dysplasia

Jeffrey L. Winslow, Thomas D. Trainer, and Richard B. Colletti, 753

#### **Original Articles**

Accuracy of Thyroid Fine-Needle Aspiration Using Receiver Operator Characteristic Curves

Andrew A. Renshaw, 477

Analysis of Factors That Influence the ASCUS/SIL Ratio of Pathologists, An

Ridas Juskevicius, Kelly H. Zou, and Edmund S. Cibas, 331 Assessment of HER-2/neu Status in Breast Cancer: Automated Cellular Imaging System (ACIS)-Assisted Quantitation of

Immunohistochemical Assay Achieves High Accuracy in Comparison With Fluorescence In Situ Hybridization Assay as the Standard

Sijian Wang, M. Hossein Saboorian, Eugene P. Frenkel, Barbara B. Haley, Momin T. Siddiqui, Sefik Gokaslan, Frank H. Wians, Jr, Linda Hynan, and Raheela Ashfaq, 495

Atypical Ductal Hyperplasia in Breast Core Needle Biopsies: Correlation of Size of the Lesion, Complete Removal of the Lesion,

and the Incidence of Carcinoma in Follow-up Biopsies Andrew A. Renshaw, Norberto Cartagena, Randy H. Schenkman, Robert P. Derhagopian, and Edwin W. Gould, 92

Cell Biology and Matrix Biochemistry of Chondromyxoid Fibroma Stephan Söder, Carrie Inwards, Susanna Müller, Thomas Kirchner, and Thomas Aigner, 271

Characterization of Human Prostate Mast Cells and Their Increase in Periprostatic Vein Thrombosis

Hans C. Bankl, MD, Puchit Samorapoompichit, Branko Pikula, Ljiljana Latinovic, Hans Bankl, Klaus Lechner, and Peter Valent, 97 Chemical Typing of Amyloid Protein Contained in Formalin-Fixed Paraffin-Embedded Biopsy Specimens

Charles L. Murphy, Manfred Eulitz, Rudi Hrncic, Knut Sletten, Per Westermark, Teresa Williams, Sallie D. Macy, Craig Wooliver, Jonathan Wall, Deborah T. Weiss, and Alan Solomon, 135

Clear Cell Odontogenic Carcinoma: Report of Two Cases and Review of the Literature Eugenio Maiorano, Mario Altini, Giuseppe Viale, Adriano Piattelli, and Gianfranco Favia, 107

Clinicopathologic Evaluation of Nodular Cutaneous Lesions of Behçet Syndrome

Cuyan Demirkesen, Nükhet Tüzüner, Cem Mat, Mustafa Senocak, Nesimi Büyükbabani, Yalçin Tüzün, and Hasan Yazici, 341

Clinicopathologic Significance of p53 and p21 Expression in the Surgical Management of Lingual Squamous Cell Carcinoma, The

Po Wing Yuen, Vivian Chow, Joe Choy, King Yin Lam, Wai Kuen Ho, and William Ignace Wei, 240

Consultative (Expert) Second Opinions in Soft Tissue Pathology: Analysis of Problem-Prone Diagnostic Situations

Zoya K. Arbiser, Andrew L. Folpe, and Sharon W. Weiss, 473 Cytokeratin 19 Immunoreactivity in the Diagnosis of Papillary

Thyroid Carcinoma: A Note of Caution

Sunati Sahoo, Syed A. Hoda, Juan Rosai, and Ronald A. DeLellis, 696

Decreased CD44 Standard Form Expression Correlates With Prognostic Variables in Ovarian Carcinomas

Jeffrey S. Ross, Christine E. Sheehan, Susan S. Williams, John H. Malfetano, Wanda M. Szyfelbein, and Bhaskar V.S. Kallakury, 122

Diagnostic Yield of Muscle Biopsy in Patients With Clinical Evidence of Mitochondrial Cytopathy

Sarah Rollins, Richard A. Prayson, James T. McMahon, and Bruce H. Cohen. 326

Expression of Vascular Endothelial Growth Factor (VEGF) and VEGF Receptor Flk-1 in Benign, Premalignant, and Malignant Prostate Tissue

Jens Köllermann and Burkhard Helpap, 115

Fundic Gland Polyps Are Not Induced by Proton Pump Inhibitor Therapy

Michael Vieth and Manfred Stolte, 716

HER2 Protein Expression and Gene Amplification in Androgen-Independent Prostate Cancer

David M. Reese, Eric J. Small, Gregg Magrane, Frederic M. Waldman, Karen Chew, and Daniel Sudilovsky, 234

Histologic Features of the Liver in Insulin Resistance-Associated Iron Overload: A Study of 139 Patients

Bruno Turlin, Michel H. Mendler, Romain Moirand, Dominique Guyader, Anne Guillygomarc'h, and Yves Deugnier, 263 Human Papillomavirus-16 E6 Variants in Cervical Squamous Intraepithelial Lesions From HIV-Negative and HIV-Positive Women Lucía Pérez-Gallego, Gema Moreno-Bueno, David Sarrió, Asunción Suárez, Carlos Gamallo, and José Palacios, 143 Immunohistochemical Analysis Still Has a Limited Role in the Diagnosis of Malignant Mesothelioma: A Study of Thirteen Antibodies

Fiona Roberts, Christina M. Harper, Ian Downie, and Rodney A. Burnett, 253

Immunohistochemical Expression of Human Erythrocyte Glucose Transporter and Fatty Acid Synthase in Infiltrating Breast Carcinomas and Adjacent Typical/Atypical Hyperplastic or Normal Breast Tissue

Piero L. Alò, Paolo Visca, Claudio Botti, Gregorio M. Galati, Valeria Sebastiani, Tiziana Andreano, Ugo Di Tondo, and Ellen S. Pizer, 129

Immunohistochemical Labeling for the Dpc4 Gene Product Is a Specific Marker for Adenocarcinoma in Biopsy Specimens of the Pancreas and Bile Duct

Metin Tascilar, G. Johan A. Offerhaus, Renee Altink, Pedram Argani, Taylor A. Sohn, Charles J. Yeo, John L. Cameron, Michael Goggins, Ralph H. Hruban, and Robb E. Wilentz, 831 Improved Reporting Methods for Atypia and Atypical Ductal Hyperplasia in Breast Core Needle Biopsy Specimens: Potential for Interlaboratory Comparisons

Andrew A. Renshaw, 87

Juxtaglomerular Cell Tumor: A Clinicopathologic Study of Four Cases and Review of the Literature

Scott A. Martin, Lance A. Mynderse, Donna J. Lager, and John C. Cheville, 854

Large Colorectal Adenomas: An Approach to Pathologic Evaluation

Elizabeth D. Euscher, Theodore H. Niemann, Joel G. Lucas, Amy M. Kurokawa, and Wendy L. Frankel, 336

Microvessel Density, Vascular Endothelial Growth Factor and Its Receptors Flt-1 and Flk-1/KDR in Hepatocellular Carcinoma Irene O.L. Ng, Ronnie T.P. Poon, Joyce M.F. Lee, Sheung T. Fan,

Matthew Ng, and Wai K. Tso, 838

Molecular Characterization and Sequence Analysis of Polyomavirus Strains Isolated From Needle Biopsy Specimens of Kidney Allograft Recipients

Renzo Boldorini, Elisabetta Omodeo-Zorini, Anna Suno, Elisabetta Benigni, Manuela Nebuloni, Elena Garino, Mirella Fortunato, Guido Monga, and Gianna Mazzucco, 489

Morphologic Features Suggestive of Gluten Sensitivity in Architecturally Normal Duodenal Biopsy Specimens

Neal S. Goldstein and Jeanette Underhill, 63

Morphometry Confirms the Presence of Considerable Nuclear Size Overlap Between "Small Cells" and "Large Cells" in High-Grade Pulmonary Neuroendocrine Neoplasms

Alberto M. Marchevsky, Anthony A. Gal, Swati Shah, and Michael N. Koss. 466

Mucinous and Nonmucinous Bronchioloalveolar Adenocarcinomas Have Distinct Staining Patterns With Thyroid Transcription Factor and Cytokeratin 20 Antibodies

Neal S. Goldstein and Maria Thomas, 319

Multiprobe FISH for Enhanced Detection of Bladder Cancer in Voided Urine Specimens and Bladder Washings

Lukas Bubendorf, Bruno Grilli, Guido Sauter, Michael J. Mihatsch, Thomas C. Gasser, and Peter Dalquen, 79

Myometrial Fibers in the Placental Basal Plate Can Confirm but Do Not Necessarily Indicate Clinical Placenta Accreta

T. Yee Khong and Alice C. Werger, 703

Neoadjuvant Chemotherapy in Cervical Carcinoma: Regulators of Cell Cycle, Apoptosis, and Proliferation as Determinants of Response to Therapy and Disease Outcome

Silvano Costa, Patrizia Terzano, Donatella Santini, Claudio Ceccarelli, Andrea Martoni, Bruna Angelelli, Achille Panetta, Alessandro Bovicelli, Paolo Cristiani, Pertti Lipponen, Mojca Erzén, Stina Syrjänen, and Kari Syrjänen, 729

p53 Nuclear Accumulation and Multiploidy Are Adverse Prognostic Factors in Surgically Resected Stage II Colorectal

Cancers Independent of Fluorouracil-Based Adjuvant Therapy Simonetta Buglioni, Igea D'Agnano, Stefania Vasselli, Raffaele Perrone Donnorso, Carmen D'Angelo, Alessia Brenna, Maria Benevolo, Maurizio Cosimelli, Gabriella Zupi, and Marcella Mottolese, 360

Pathologists' Assistants Practice: A Measurement of Performance Colleen O. Galvis, Stephen S. Raab, Frank D'Amico, and Dana M. Grzybicki, 816

Patterns of Protein Kinase C Isoenzyme Expression in Transitional Cell Carcinoma of Bladder: Relation to Degree of Malignancy Leah Langzam, Rumelia Koren, Rivka Gal, Valentina Kugel, Adrian Paz, Amicur Farkas, and Sanford R. Sampson, 377

Portal Tract Eosinophils and Hepatocyte Cytokeratin 7 Immunoreactivity Helps Distinguish Early-Stage, Mildly Active Primary Biliary Cirrhosis and Autoimmune Hepatitis

Neal S. Goldstein, Anjina Soman, and Stuart C. Gordon, 846 Primary Liver Carcinoma in Genetic Hemochromatosis Reveals a Broad Histologic Spectrum

Mohib Morcos, Sylvie Dubois, Marie-Pierre Bralet, Jacques Belghiti, Claude Degott, and Benoît Terris, 738

Pulmonary Granuloma Caused by Pseudomonas andersonii sp nov Xiang Y. Han, Audrey S. Pham, Kim U. Nguyen, W. Rov Smythe, Nelson G. Ordonez, Kalen L. Jacobson, and Jeffrey J. Tarrand, 347 Qualification of ASCUS: A Comparison of Equivocal LSIL and Equivocal HSIL Cervical Cytology in the ASCUS LSIL Triage Study

Mark E. Sherman, Diane Solomon, and Mark Schiffman, 386 Reduced Number of CD1a+ Cells in Cutaneous B-Cell Lymphoma Matthias Schmuth, Alexis Sidoroff, Barbara Danner, Gerda Topar, and Norbert T. Sepp, 72

Relative Importance of Anatomic and PSA Factors to Outcomes After Radical Prostatectomy for Prostate Cancer, The Robin T. Vollmer and Peter A. Humphrey, 864

Robotic Telepathology for Intraoperative Remote Diagnosis Using a Still-Imaging-Based System

Francesca Demichelis, Mattia Barbareschi, Sebastiana Boi, Claudio Clemente, Paolo Dalla Palma, Claudio Eccher, and Stefano Forti, 744

Serum Creatine Kinase Levels Parallel the Clinical Course for Rhabdomyomatous Wilms Tumor

gists

Brett Delahunt, Margaret E. Lewis, Kevin C. Pringle, Esko J. Wiltshire, and Michael J. Crooke, 354

Should Atypical Squamous Cells of Undetermined Significance (ASCUS) Be Subcategorized? Accuracy Analysis of Papanicolaou Smears Using Receiver Operating Characteristic Curves and Implications for the ASCUS/Squamous Intraepithelial Lesion Ratio Andrew A. Renshaw, David R. Genest, and Edmund S. Cibas, 692

Significant Correlations of E-Cadherin, Catenin, and CD44 Variant Form Expression With Carcinoma Cell Differentiation and Prognosis of Extrahepatic Bile Duct Carcinomas

Tetuo Mikami, Makoto Saegusa, Hiroyuki Mitomi, Nobuyuki Yanagisawa, Masaaki Ichinoe, and Isao Okayasu, 369

Surfactant Protein A Expression in Human Normal and Neoplastic Breast Epithelium

Paola Braidotti, Claudia Cigala, Daniela Graziani, Barbara Del Curto, Enrico Dessy, Guido Coggi, Silvano Bosari, and Giuseppe G. Pietra, 721

Use of a Panel of Markers in the Differential Diagnosis of Adenocarcinoma and Reactive Mesothelial Cells in Fluid Cytology Ellen C. Ko, Nirag C. Jhala, Jana J. Shultz, and David C. Chhieng, 709

Value of p63 and Cytokeratin 5/6 as Immunohistochemical Markers for the Differential Diagnosis of Poorly Differentiated and Undifferentiated Carcinomas

Olaf Kaufmann, Ellen Fietze, Jörg Mengs, and Manfred Dietel, 823

Value of Thyroid Transcription Factor-1 in Cytologic Preparations as a Marker for Metastatic Adenocarcinoma of Lung Origin, The Jonathan L. Hecht, Jack L. Pinkus, Lisa J. Weinstein, and Geraldine S. Pinkus, 483

WT1 Is an Integral Component of an Antibody Panel to Distinguish Pancreaticobiliary and Some Ovarian Epithelial Neoplasms Neal S. Goldstein, Deepa Bassi, and Alison Uzieblo, 246

## **CLINICAL CHEMISTRY**

### **Original Articles**

Clinical Significance of Low-Positive Troponin I by AxSYM and ACS:180

James S. Lewis, Jr, James F. Taylor, Andrew Z. Miklos, Katherine S. Virgo, Michael H. Creer, and Detlef G. Ritter, 396 Evaluation of the Passive Particle Agglutination Test in the Serodiagnosis and Follow-up of Syphilis

Rita R. Castro, Emília S. Prieto, Irene Santo, Jacinta Azevedo, and Filomena da L. Exposto, 581

Impact of Requisition Design on Laboratory Utilization, The Jane F. Emerson and Scott S. Emerson, 879

Plasma Total Transcobalamin I: Ethnic/Racial Patterns and Comparison With Lactoferrin

Ralph Carmel, Shabneet Brar, and Zohreh Frouhar, 576
Positive and Negative In Vitro Interference of Chinese Medicine
Dan Shen in Serum Digoxin Measurement: Elimination of
Interference by Monitoring Free Digoxin Concentration
Amer Wahed and Amitava Dasgupta, 403

Safely Reducing Manual Urine Microscopy Analyses by Combining Urine Flow Cytometer and Strip Results Sylvie Roggeman and Zahur Zaman, 872

## COAGULATION AND TRANSFUSION MEDICINE

#### Case Reports

HIV Transmissions From a Window-Period Platelet Donation
Patricia M. Kopko, Leonor P. Fernando, Erica N. Bonney, Jed L.
Freeman, and Paul V. Holland, 562

## **Original Articles**

Cytomegalovirus Infectivity in Whole Blood Following Leukocyte Reduction by Filtration

Steven M. Lipson, David H. Shepp, Mark E. Match, Frederick B. Axelrod. and John A. Whitbread. 52

Oxidized Low-Density Lipoprotein and Autoimmune Antibodies in Patients With Antiphospholipid Syndrome With a History of Thrombosis

Dandan Zhao, Hirokazu Ogawa, Xiang Wang, Gregory S. Cameron, Darric E. Baty, Jeffrey S. Dlott, and Douglas A. Triplett, 760

Quantification and Facilitated Comparison of von Willebrand Factor Multimer Patterns by Densitometry

Jan D. Studt, Ulrich Budde, Reinhard Schneppenheim, Roswit Eisert, Mario von Depka Prondzinski, Arnold Ganser, and

Monika Barthels, 567 Role of Cysteine and Homocysteine in Venous and Arterial Thrombotic Disease, The

Rossella Marcucci, Tamara Brunelli, Betti Giusti, Sandra Fedi, Guglielmina Pepe, Daniela Poli, Domenico Prisco, Rosanna Abbate, and Gian Franco Gensini, 56

#### COMMENTARIES

Current Status of HER2 Testing: Caught Between a Rock and a Hard Place

Stuart J. Schnitt and Timothy W. Jacobs, 806

Lymphoma Transformation: Genetic Relatedness, Stealth

Lymphomas, and the Final Frontier

Steven H. Kroft, 811

Lymphoplasmacytic Lymphoma/Waldenström Macroglobulinemia: One Disease or Three?

Madeleine D. Kraus, 799

NISHOT: On Target, But There's No Magic Bullet Paul D. Mintz, 802

## **EDITORIALS**

Digital Diagnoses in an Analog World Stacey E. Mills, 463

Mind's Eye, The

Sylvia L. Asa and Carol C. Cheung, 635

Sailing Past the Horizon: The Histologic Diagnosis of Celiac

Disease in "Nonflat" Intestinal Mucosa Christopher A. Moskaluk, 7 Subcategorization of Papanicolaou Tests Diagnosed as Atypical Squamous Cells of Undetermined Significance Stephen S. Raab, 631

## HEMATOPATHOLOGY

#### **Original Articles**

0

a:

gists

Absence of Somatic Hypermutation of Immunoglobulin Heavy Chain Variable Region Genes in Precursor B-Lymphoblastic Lymphoma: A Study of Four Cases in Childhood and Adolescence

Hiroshi Hojo, Yoshikazu Sasaki, Naoya Nakamura, and Masafumi Abe, 673

Automated Quantitation of Hemoglobin-Based Blood Substitutes in Whole Blood Samples

Jolanta Kunicka, Michael Malin, David Zelmanovic, Marc Katzenberg, William Canfield, Phyllis Shapiro, and Narla Mohandas, 913

Bone Marrow Mast Cell Morphologic Features and Hematopoietic Dyspoiesis in Systemic Mast Cell Disease

Eric C. Stevens and Nancy S. Rosenthal, 177

CD56+/CD4+ Lymphomas and Leukemias Are Morphologically, Immunophenotypically, Cytogenetically, and Clinically Diverse Christiane K. Rakozy, Anwar N. Mohamed, Trieu D. Vo, Ghada Khatib, P. Michael Long, David Eilender, and Margarita Palutke, 168

Clinicopathologic Analysis of CD10+ and CD10- Diffuse Large B-Cell Lymphoma: Identification of a High-Risk Subset With Coexpression of CD10 and bcl-2

Yin Xu, Robert W. McKenna, Kyle H. Molberg, and Steven H.

Cyclin D1 Overexpression in Multiple Myeloma: A Morphologic, Immunohistochemical, and In Situ Hybridization Study of 71

Paraffin-Embedded Bone Marrow Biopsy Specimens Evangelia Athanasiou, Vassiliki Kaloutsi, Vassiliki Kotoula, Prodromos Hytiroglou, Ioannis Kostopoulos, Costas Zervas, Panagiotis Kalogiannidis, Athanasios Fassas, John 1. Christakis, and Constantine S. Papadimitriou, 535

Cytogenetic Findings in Lymphoplasmacytic

Lymphoma/Waldenström Macroglobulinemia: Chromosomal Abnormalities Are Associated With the Polymorphous Subtype and an Aggressive Clinical Course

Adnan Mansoor, L. Jeffrey Medeiros, Donna M. Weber, Raymond Alexanian, Kimberly Hayes, Dan Jones, Raymond Lai, Armand Glassman, and Carlos E. Bueso-Ramos, 543 Cytogenetic Findings in Mantle Cell Lymphoma: Cases With a High Level of Peripheral Blood Involvement Have a Distinct Pattern of Abnormalities

Mihaela Onciu, Ellen Schlette, L. Jeffrey Medeiros, Lynne V. Abruzzo, Michael Keating, and Raymond Lai, 886

Detection of Clonal T-Cell Receptor-gamma Gene Rearrangement by PCR/Temporal Temperature Gradient Gel Electrophoresis

Dan Zhu, Marshall E. Kadin, and Michael Samoszuk, 527 Hepatosplenic gamma/delta T-Cell Lymphoma in Bone Marrow: A Sinusoidal Neoplasm With Blastic Cytologic Features

Francisco Vega, L. Jeffrey Medeiros, Carlos Bueso-Ramos, Dan Jones, Raymond Lai, Rajyalakshmi Luthra, and Lynne V. Abruzzo, 410 Hepatosplenic gamma/delta T-Cell Lymphoma in Immunocompromised Patients: Report of Two Cases and Review of

Waqar A. Khan, Lelia Yu, Arthur B. Eisenbrey, Domnita Crisan, Abdul Al Saadi, Bruce H. Davis, Rebecca C. Hankin, and Joan C. Mattson, 41

Higher Levels of Surface CD20 Expression on Circulating Lymphocytes Compared With Bone Marrow and Lymph Nodes in B-Cell Chronic Lymphocytic Leukemia

Yang O. Huh, Michael J. Keating, Helene L. Saffer, Iman Jilani, Susan Lerner, and Maher Albitar, 437

High Resolution Immunophenotypic Analysis of Chronic Lymphocytic Leukemic Cells by Enzymatic Amplification Staining David Kaplan, Howard Meyerson, and Kristine Lewandowska, 429 Hyperplasia of Mantle/Marginal Zone B Cells With Clear Cytoplasm in Peripheral Lymph Nodes: A Clinicopathologic Study of 35 Cases

John P. Hunt, Joel A. Chan, Michael Samoszuk, Russell K. Brynes, Antonio M. Hernandez, Randall Bass, Dennis D. Weisenburger, Konrad Müller-Hermelink, and Bharat N. Nathwani, 550

Immunophenotypic Analysis of Peripheral T-Cell Neoplasms: A Multiparameter Flow Cytometric Approach

Saba Jamal, Louis J. Picker, Deborah B. Aquino, Robert W. McKenna, D. Brian Dawson, and Steven H. Kroft, 512

Immunophenotyping Large B-Cell Lymphomas: Flow Cytometric Pitfalls and Pathologic Correlation

Heidi C. Bertram, Irene J. Check, and Michelangelo A. Milano, 191 Laboratory, Morphologic, and Immunophenotypic Correlates of Surface Immunoglobulin Heavy Chain Isotype Expression in B-Cell Chronic Lymphocytic Leukemia

Peter U.F. Shen, Sheila G. Fuller, William N. Rezuke, Bradford J. Sherburne, and Joseph A. DiGiuseppe, 905

Lymphoplasmacytic Lymphoma/Waldenström Macroglobulinemia Associated With Hodgkin Disease: A Report of Two Cases

Cecilia M. Rosales, Pei Lin, Adnan Mansoor, Carlos Bueso-Ramos, and L. Jeffrey Medeiros, 34

Myeloperoxidase Immunoreactivity in Adult Acute Lymphoblastic

Daniel A. Arber, David S. Snyder, Miriam Fine, Andrew Dagis, Joyce Niland, and Marilyn L. Slovak, 25

Novel Four-Color PCR Assay to Assess T-Cell Receptor Gamma Gene Rearrangements in Lymphoproliferative Lesions, A Francisco Vega, L. Jeffrey Medeiros, Dan Jones, Lynne V. Abruzzo, Raymond Lai, John Manning, Valerie Dunmire, and Rajvalakshmi Luthra, 17

Pathology of Autoimmune Myelofibrosis: A Report of Three Cases and a Review of the Literature

Randall D. Bass, Vinod Pullarkat, Donald I. Feinstein, Anita Kaul, Carl D. Winberg, and Russell K. Brynes, 211

Prevalence and Cellular Reservoir of Latent Human Herpesvirus 6 in Tonsillar Lymphoid Tissue

Karen S. Roush, Rana K. Domiati-Saad, Linda R. Margraf, Karen Krisher, Richard H. Scheuermann, Beverly Barton Rogers, and D. Brian Dawson, 648

Primary Diagnosis of Whipple Disease Manifesting as Lymphadenopathy: Use of Polymerase Chain Reaction for Detection of *Tropheryma whippelii* 

Serhan Alkan, Theodore F. Beals, and Bertram Schnitzer, 898 Rapid Presumptive Diagnosis of Hantavirus Cardiopulmonary Syndrome by Peripheral Blood Smear Review

Frederick Koster, Kathryn Foucar, Brian Hjelle, Amy Scott, Yap-Yee Chong, Richard Larson, and Melvina McCabe, 665

Terminal Deoxynucleotidyl Transferase–Positive Cells in Human Tonsils. 12

James A. Strauchen and Lorraine K. Miller
Transient Myeloproliferative Disorder and Acute Myeloid
Leukemia in Down Syndrome: An Immunophenotypic Analysis
Nitin J. Karandikar, Deborah B. Aquino, Robert W. McKenna,
and Steven H. Kroft. 204

Tumor Cells in Nodular Lymphocyte-Predominant Hodgkin Disease Are Clonally Related to the Large Cell Lymphoma Occurring in the Same Individual: Direct Demonstration by Single Cell Analysis, The

Toshiyuki Ohno, James Z. Huang, Grant Wu, Kwang Hwa Park, Dennis D. Weisenburger, and Wing C. Chan, 506

Typical and Atypical Chronic Lymphocytic Leukemia Differ Clinically and Immunophenotypically

John L. Frater, Karen F. McCarron, Jeffrey P. Hammel, Joel L. Shapiro, Michael L. Miller, Raymond R. Tubbs, James Pettay, and Eric D. Hsi. 655

Value of CD23 Determination by Flow Cytometry in Differentiating Mantle Cell Lymphoma From Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma

Jerald Z. Gong, Anand S. Lagoo, David Peters, Joe Horvatinovich, Pat Benz, and Patrick J. Buckley, 893

Waldenström Macroglobulinemia Caused by Extranodal Marginal Zone B-Cell Lymphoma: A Report of Six Cases

Riccardo Valdez, William G. Finn, Charles W. Ross, Timothy P. Singleton, Joseph A. Tworek, and Bertram Schnitzer, 683

Waldenström Macroglobulinemia: Development of Diagnostic Criteria and Identification of Prognostic Factors

Roger G. Owen, Sharon L. Barrans, Stephen J. Richards, Sheila J.M. O'Connor, J. Anthony Child, Liakat A. Parapia, Gareth J. Morgan, and Andrew S. Jack, 420

## MICROBIOLOGY AND INFECTIOUS DISEASE

### **Original Articles**

Amplified In Situ Hybridization With Peptide Nucleic Acid Probes for Differentiation of *Mycobacterium tuberculosis* Complex and Nontuberculous *Mycobacterium* Species on Formalin-Fixed, Paraffin-Embedded Archival Biopsy and Autopsy Samples

Pietro Zerbi, Andreas Schønau, Sara Bonetto, Andrea Gori, Giulio Costanzi, Piergiorgio Duca, and Luca Vago, 770 Clinical and Pathologic Features of Mycobacterium fortuitum Infections: An Emerging Pathogen in Patients With AIDS Michael B Smith, Vicki J. Schnadig, Michael C. Boyars, and Gail L. Woods, 225

Evaluation of the Prodesse Hexaplex Multiplex PCR Assay for Direct Detection of Seven Respiratory Viruses in Clinical Specimens Musa Hindiveh, David R. Hillvard, and Karen C. Carroll. 218

## PATHOLOGY PATTERNS REVIEWS

Applications of Meta-Analysis in Pathology Practice *Eleftherios C. Vamvakas*, S47

Atherosclerosis: A Cancer of the Blood Vessels?

Jeffrey S. Ross, Nancy E. Stagliano, Michael J. Donovan, Roger
E. Breitbart, and Geoffrey S. Ginsburg, MD, S97

Classification in Anatomic Pathology Elliott Foucar, S5

Diagnostic Decision-Making in Anatomic Pathology
Elliott Foucar, S21

Error in Anatomic Pathology Elliott Foucar, S34

Generation of Narrative Interpretations in Laboratory Medicine, The: A Description of Service-Specific Sign-Out Rounds Alexander Kratz, Britt L. Soderbere, Zbigniew M.

Alexander Kratz, Britt L. Soderberg, Zbigniew M. Szczepiorkowski, Anand S. Dighe, James Versalovic, and Michael Laposata, \$133

Inflammation and Atherosclerosis: The Value of the High-Sensitivity C-Reactive Protein Assay as a Risk Marker Ishwarlal Jialal and Sridevi Devarai, \$108

Narrative Interpretations for Clinical Laboratory Evaluations: An Overview

Anand S. Dighe, Britt L. Soderberg, and Michael Laposata, \$123 Neuroendocrine Neoplasms of the Lung

Lisa A. Cerilli, Jon H. Ritter, Stacey E. Mills, and Mark R. Wick, S65 Perspective of a Plaintiff's Attorney in Dissembling the Art of Medicine as It Relates to the Interpretation and Management of Cervical Smears. The

Jerry I. Meyers, \$116

Regulations Regarding Reflexive Testing and Narrative Interpretations in Laboratory Medicine

Donna H. MacMillan, Britt L. Soderberg, and Michael Laposata, S129

### SPECIAL ARTICLES

Laboratory Results: Timeliness as a Quality Attribute and Strategy, 311 Joan H. Howanitz and Peter J. Howanitz

Proteasome, The: A New Target for Novel Drug Therapies Peter J. Elliott and Jeffrey S. Ross, 637

# subject index

Index of Issues: July, pp 1-160; August, pp 161-304; September, pp 305-456; October, pp 457-624; November, pp 625-792; December, pp 793-952. Page numbers beginning with S denote articles in the December Pathology Patterns Reviews.

## A

ABO groups, noninfectious serious hazards of transfusion, 802 Abstracts of Papers, 278, 586

#### Accuracy

- of Papanicolaou smears using receiver operator curve analysis. and implications for the ASCUS/squamous intraepithelial lesion ratio, 692
- of thyroid fine-needle aspiration using receiver operator curve analysis, 477

#### Acknowledgments, 920

#### Adenocarcinoma

- bronchioloalveolar, mucinous and nonmucinous have distinct staining patterns with thyroid transcription factor and cytokeratin 20 antibodies, 319
- collagenous gastritis, long-term follow-up with the development of endocrine cell hyperplasia, intestinal metaplasia, and epithelial changes indeterminate for dysplasia, 753
- differential diagnosis of reactive mesothelial cells and, in fluid cytology, use of panel of markers for, 709
- immunohistochemistry for differential diagnosis of mesothelioma from 253
- of lung origin, thyroid transcription factor-1, in cytologic preparations, as marker for metastatic, value of, 483
- of pancreas and bile duct, immunohistochemical labeling for Dpc4 gene product is specific marker for, 831

#### Adenoma

11

gists

- follicular, of thyroid, cytokeratin 19 immunoreactivity in diagnosis of, 696
- large colorectal, an approach to pathologic evaluation, 336 Aggrecan, cell biology and matrix biochemistry of chondromyxoid
- Allograft, kidney, polyomavirus strains isolated from needle biopsy specimens of recipients of, molecular characterization and sequence analysis of, 489

### Ameloblastoma, clear cell, 107

- Amyloid, contained in formalin-fixed paraffin-embedded biopsy specimens, chemical typing of, 135
- Amyloidosis, chemical typing of amyloid protein contained in formalin-fixed paraffin-embedded biopsy specimens, 135

#### Anatomic pathology

- classification in, \$5
- diagnostic decision-making in, S21
- diagnostic error in, \$34

Anemia, narrative reports for, generation of, \$134

## Angiogenesis

microvessel density, vascular endothelial growth factor and its receptors Flt-1 and Flk-1/KDR in hepatocellular carcinoma,

#### proteasome inhibitors in, 637

- Antigens, aberrant, in peripheral T-cell neoplasms, 512
- Antiphospholipid syndrome, oxidized low-density lipoprotein, and autoimmune antibodies in patients with, with a history of thrombosis 760
- Apoptosis, regulators of cell cycle and proliferation and, as determinants of response to neoadjuvant chemotherapy and disease outcome in cervical carcinoma, 729
- Arthritis, rheumatoid, proteasome inhibitors for treatment of, 637
- ASCUS LSIL Triage Study, qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the, 386

### Atherosclerosis

- as a cancer of the blood vessels. \$97
- inflammation and, value of high-sensitivity C-reactive protein assay as risk marker, \$108

- atypical ductal hyperplasia in breast core needle biopsies, correlation of size of lesion, complete removal of lesion, and incidence of carcinoma in follow-up biopsies, 92
- improved reporting methods for atypia and atypical ductal hyperplasia in breast core needle biopsy specimens, potential for interlaboratory comparisons, 87

### Atypical squamous cells of undetermined significance

- factors that influence the ASCUS/SIL ratio of pathologists, analysis of, 331
- Papanicolaou tests diagnosed as, subcategorization of, 631 qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the ASCUS LSIL Triage Study, 386
- subcategorization of, accuracy analysis of Papanicolaou smears using receiver operating curves and implications for the ASCUS/squamous intraepithelial lesion ratio, 692

#### Autoimmune disorders

- myelofibrosis, pathology of, a report of three cases and a review of the literature, 211
- narrative reports for, generation of, \$135

## B

B72.3, in differential diagnosis of adenocarcinoma and reactive mesothelial cells, 709

Basal cells, vascular endothelial growth factor and vascular endothelial growth factor receptor fetal liver kinase-1 expression, in benign, premalignant, and malignant prostate tissue, 115

#### B cells

B-cell chronic lymphocytic leukemia

higher levels of surface CD20 expression on circulating lymphocytes compared with bone marrow and lymph nodes, 437

laboratory, morphologic, and immunophenotypic correlates of surface immunoglobulin heavy chain isotype expression in, 905

clinicopathologic analysis of CD10+ and CD10- diffuse large Bcell lymphoma, identification of a high-risk subset with coexpression of CD10 and bcl-2, 183

hyperplasia of mantle/marginal zone B cells with clear cytoplasm in peripheral lymph nodes, a clinicopathologic study of 35 cases, 550

immunophenotyping large B-cell lymphomas, flow cytometric pitfalls and pathologic correlation, 191

precursor B-lymphoblastic lymphoma, absence of somatic hypermutation of immunoglobulin heavy chain variable region genes in, a study of four cases in childhood and adolescence, 673

Bcl-2 protein, clinicopathologic analysis of CD10+ and CD10- diffuse large B-cell lymphoma, identification of a high-risk subset with coexpression of CD10 and, 183

Behçet syndrome, nodular cutaneous lesions of, clinicopathologic evaluation of, 341

Bethesda System, qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the ASCUS LSIL Triage Study, 386

### Bile duct

adenocarcinoma of, immunohistochemical labeling for Dpc4 gene product is specific marker for, 831

extrahepatic carcinoma of, significant correlations of E-cadherin, catenin, and CD44 variant form expression with carcinoma cell differentiation and prognosis of, 369

portal tract eosinophils and hepatocyte cytokeratin 7 immunoreactivity helps distinguish early-stage, mildly active primary biliary cirrhosis and autoimmune hepatitis, 846

Biopsy, needle. See Core biopsy; Fine-needle aspiration biopsy Bladder cancer

multiprobe FISH for enhanced detection of, in voided urine specimens and bladder washings, 79

transitional cell carcinoma, patterns of protein kinase C isoenzyme expression in, relation to degree of malignancy, 377

Bladder washings, multiprobe FISH, for enhanced detection of bladder cancer in voided urine specimens and, 79

Blood smears, hantavirus cardiopulmonary syndrome, rapid presumptive diagnosis by review of, 665

Blood substitutes, hemoglobin-based, automated quantitation of, in whole blood samples. 913

Blood vessels, atherosclerosis and cancer of the, S97 Bone marrow

autoimmune myelofibrosis, pathology of, a report of three cases and a review of the literature,  $211\,$ 

cyclin D1 overexpression in multiple myeloma, a morphologic,

immunohistochemical, and in situ hybridization study of 71 paraffin-embedded biopsy specimens of, 535

hepatosplenic gamma/delta T-cell lymphoma in, a sinusoidal neoplasm with blastic cytologic features, 410

higher levels of surface CD20 expression on circulating lymphocytes compared with lymph nodes and, in B-cell chronic lymphocytic leukemia, 437

mast cell morphologic features and hematopoietic dyspoiesis in systemic mast cell disease, 177

Waldenström macroglobulinemia, infiltration by lymphocytes in, 420

Waldenström macroglobulinemia/lymphoplasmacytic lymphoma associated with Hodgkin disease, 34

Book Reviews, 444, 612, 776

#### Breast

atypical ductal hyperplasia in core needle biopsies of, correlation of size of lesion, complete removal of lesion, and incidence of carcinoma in follow-up biopsies, 92

improved reporting methods for atypia and atypical ductal hyperplasia in core needle biopsy specimens from, potential for interlaboratory comparisons, 87

#### Breast cancer

#### carcinoma

atypical ductal hyperplasia in breast core needle biopsies, correlation of size of lesion, complete removal of lesion, and incidence of carcinoma in follow-up biopsies, 92

immunohistochemical expression of human erythrocyte glucose transporter and fatty acid synthase, in infiltrating, and adjacent typical/atypical hyperplastic or normal breast tissue, 129 surfactant protein A expression in human normal and neoplastic breast epithelium, 721

#### HER2/neu protein status in

assessment of, Automated Cellular Imaging System (ACIS)assisted quantitation of immunohistochemical assay achieves high accuracy in comparison with fluorescence in situ hybridization assay as the standard, 495 current status of testing for, 806

improved reporting methods for atypia and atypical ductal hyperplasia in breast core needle biopsy specimens, potential for interlaboratory comparisons, 87

#### r

CA-125, and WT1 as integral component of antibody panel to distinguish pancreaticobiliary and some ovarian epithelial neoplasms, 246

E-Cadherin, significant correlations of expression of catenin, CD44 variant form and, with carcinoma cell differentiation and prognosis of extrahepatic bile duct carcinomas, 369

Calretinin, in differential diagnosis of adenocarcinoma and reactive mesothelial cells, in fluid cytology, 709

Cancer. See also Neoplasms

atherosclerosis as a cancer of the blood vessels, S97 proteasome inhibitors for treatment of, 637

Carcinoembryonic antigen

in differential diagnosis of adenocarcinoma and reactive mesothelial cells, 709

and WT1 as integral component of antibody panel to distinguish pancreaticobiliary and some ovarian epithelial neoplasms, 246 Carcinoma. See also Adenocarcinoma

of bile duct, extrahepatic, significant correlations of E-cadherin, catenin, and CD44 variant form expression with carcinoma cell differentiation and prognosis of, 369

of bladder, transitional cell, patterns of protein kinase C isoenzyme expression in, relation to degree of malignancy, 377

of breast. See Breast cancer cervical, neoadjuvant chemotherapy in, regulators of cell cycle, apoptosis, and proliferation as determinants of response to therapy and disease outcome, 729

lingual squamous cell, clinicopathologic significance of p53 and p21 expression in surgical management of, 240

of liver

in genetic hemochromatosis, as revealing broad histologic spectrum, 738

microvessel density, vascular endothelial growth factor and its receptors Flt-1 and Flk-1/KDR in hepatocellular carci-

of lung

morphometry confirms presence of considerable nuclear size overlap between "small cells" and "large cells" in highgrade pulmonary neuroendocrine neoplasms, 466 neuroendocrine neoplasms, S65

odontogenic, clear cells in, report of two cases and review of the literature, 107

of ovary, CD44 standard form expression, decreased, correlates with prognostic variables in, 122

poorly differentiated and undifferentiated, p63 and cytokeratin 5/6 as immunohistochemical markers for differential diagnosis of, 823

of prostate, vascular endothelial growth factor and vascular endothelial growth factor receptor fetal liver kinase-1 expression in benign, premalignant, and malignant prostate tissue, 115

of thyroid gland

4

e

ists

papillary, cytokeratin 19 immunoreactivity in diagnosis of,

receiver operator curve analysis for measuring accuracy of fine-needle aspiration biopsy, 477

Cardiac markers, clinical significance of low-positive troponin I, by AxSYM and ACS:180, 396

Cardiac troponin I, clinical significance of low-positive, by AxSYM and ACS:180, 396

Cascades, and impact of requisition design on laboratory utilization, 879 Catenins

beta-catenin in atherosclerosis and cancer, S101

significant correlations of expression of E-cadherin, CD44 variant form and, with carcinoma cell differentiation and prognosis of extrahepatic bile duct carcinomas, 369

CD1a, reduced number of CD1a+ cells in cutaneous B-cell lymphoma, 72

CD4, CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically

CD10, clinicopathologic analysis of CD10+ and CD10- diffuse large B-cell lymphoma, identification of a high-risk subset with coexpression of CD10 and bcl-2, 183

CD20, in B-cell chronic lymphocytic leukemia, higher levels of surface expression of, on circulating lymphocytes compared with bone marrow and lymph nodes, 437

CD23, determination by flow cytometry, value in differentiating mantle cell lymphoma from chronic lymphocytic leukemia/small lymphocytic lymphoma, 893

CD38, expression of, in B-cell chronic lymphocytic leukemia, 905

significant correlations of expression of E-cadherin, catenin, and variant form, with carcinoma cell differentiation and prognosis of extrahepatic bile duct carcinomas, 369

standard form, decreased expression of correlates with prognostic variables in ovarian carcinomas, 122

CD56, CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically diverse, 168

Celiac disease, morphologic features suggestive of gluten sensitivity in architecturally normal duodenal biopsy specimens, 7, 63

Cell cycle proteins, regulation of apoptosis and proliferation and, as determinants of response to neoadjuvant chemotherapy and disease outcome in cervical carcinoma, 729

Cell cycle regulation, in atherosclerosis and cancer, S99

Cell differentiation, cell biology and matrix biochemistry of chondromyxoid fibroma, 271

Cell lineages, patterns of protein kinase C expression in transitional cell carcinoma of the bladder, relation to degree of malignancy, 377

C-erb-2. See HER2/neu protein

Cervical cancer

carcinoma, neoadjuvant chemotherapy in, regulators of cell cycle, apoptosis, and proliferation as determinants of response to therapy and disease outcome, 729

plaintiff's attorney's perspective in dissembling art of medicine as it relates to interpretation and management of cervical smears, S116

Cervix, uterine. See also Cervical cancer

human papillomavirus-16 E6 variants in cervical squamous intraepithelial lesions from HIV-negative and HIV-positive women, 143

Chemotherapy, neoadjuvant, in cervical carcinoma, regulators of cell cycle, apoptosis, and proliferation as determinants of response to therapy and disease outcome, 729

Children, latent human herpesvirus 6 in tonsillar lymphoid tissue from, prevalence and cellular reservoir of, 648

Chinese medicine Dan Shen, positive and negative in vitro interference in serum digoxin measurement by, elimination of interference by monitoring free digoxin concentration, 403

Cholangiocarcinoma, in genetic hemochromatosis, 738

Chromosomal abnormalities, in lymphoplasmacytic lymphoma/Waldenström macroglobulinemia, as associated with the polymorphous subtype and an aggressive clinical course, 543

Cirrhosis, primary biliary, portal tract eosinophils and hepatocyte cytokeratin 7 immunoreactivity helps distinguish autoimmune hepatitis and early-stage, mildly active, 846

CK-MB, serum levels parallel the clinical course for rhabdomyomatous Wilms tumor, 354

Classification, in anatomic pathology, S5

Clear cells

hyperplasia of mantle/marginal zone B cells with clear cytoplasm in peripheral lymph nodes, a clinicopathologic study of 35 cases, 550

in odontogenic carcinoma, report of two cases and review of the literature, 107

Coagulation, narrative reports for, generation of, \$133

Cobalamin, plasma total transcobalamin I, ethnic/racial patterns and comparison with lactoferrin, 576

Collager

cell biology and matrix biochemistry of chondromyxoid fibroma, 271 collagenous gastritis, long-term follow-up with the development of endocrine cell hyperplasia, intestinal metaplasia, and epithelial changes indeterminate for dysplasia, 753

Collagen vascular disease, autoimmune myelofibrosis associated with 211

Colorectal cancer, p53 nuclear accumulation and multiploidy are adverse prognostic factors in surgically resected stage II cancers independent of fluorouracil-based adjuvant therapy, 360

Complementarity determining region, nodular lymphocyte predominant Hodgkin disease, tumor cells of, as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by single cell analysis, 506

Core biopsy, of breast

atypical ductal hyperplasia in, correlation of size of lesion, complete removal of lesion, and incidence of carcinoma in follow-up biopsies, 92

improved reporting methods for atypia and atypical ductal hyperplasia in specimens from, potential for interlaboratory comparisons, 87

Correspondence, 152, 295, 445, 613, 778, 945

C-reactive protein, high-sensitivity, as risk marker for cardiovascular events, \$108

Creatine kinase, serum levels parallel the clinical course for rhabdomyomatous Wilms tumor, 354

Creatine kinase MB. See CK-MB

Curbside consultation, and narrative interpretations for clinical laboratory evaluations, S125

Cyclin D1, overexpression in multiple myeloma, a morphologic, immunohistochemical, and in situ hybridization study of 71 paraffin-embedded bone marrow biopsy specimens, 535

Cysteine, and homocysteine, in venous and arterial thrombotic disease, 56

Cytogenetics

CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically diverse, 168

lymphoplasmacytic lymphoma/Waldenström macroglobulinemia, chromosomal abnormalities are associated with the polymorphous subtype and an aggressive clinical course, 543

mantle cell lymphoma, cytogenetic findings in, cases with a high level of peripheral blood involvement have distinct pattern of abnormalities, 886

Cytokeratins

cytokeratin 19 immunoreactivity in diagnosis of papillary thyroid carcinoma, 635, 696

hepatocyte cytokeratin 7 immunoreactivity and portal tract eosinophils helps distinguish early-stage, mildly active primary biliary cirrhosis and autoimmune hepatitis, 846

mucinous and nonmucinous bronchioloalveolar adenocarcinomas have distinct staining patterns with cytokeratin 20 antibodies and, 319

p63 and cytokeratin 5/6 as immunohistochemical markers for differential diagnosis of poorly differentiated and undifferentiated carcinoma, 823 and WT1 as integral component of antibody panel to distinguish pancreaticobiliary and some ovarian epithelial neoplasms, 246

Cytology. See also Gynecologic cytology

fine-needle aspiration biopsy, of thyroid gland, receiver operator curve analysis for measuring accuracy of, 477

Cytomegalovirus, infectivity in whole blood following leukocyte reduction by filtration, 52

Cytopathology

classification in, S5

factors that influence the ASCUS/SIL ratio of pathologists, analysis of, 331

Cytopathy, mitochondrial, diagnostic yield of muscle biopsy in patients with clinical evidence of, 326

D

Dan Shen, positive and negative in vitro interference in serum digoxin measurement by, elimination of interference by monitoring free digoxin concentration, 403

Decision-making, diagnostic, in anatomic pathology, \$21

Densitometry, von Willebrand factor multimer patterns, quantification and facilitated comparison of, by, 567

Diagnosis

and classification in anatomic pathology,  ${\tt S5}$ 

decision-making in anatomic pathology, S21

digital versus analog approaches to, 463

intraoperative remote, robotic telepathology for, using a stillimaging system, 744

second opinions in soft tissue pathology, analysis of problemprone diagnostic situations, 473

Diagnostic accuracy

and classification in anatomic pathology, S5 of laboratory tests, meta-analysis of, S47

Diagnostic error

in anatomic pathology, S34

plaintiff's attorney's perspective in dissembling art of medicine as it relates to interpretation and management of cervical smears, \$116

Digoxin, positive and negative in vitro interference in serum digoxin measurement by Chinese medicine Dan Shen, elimination of interference by monitoring free digoxin concentration, 403

Down syndrome, transient myeloproliferative disorder and acute myeloid leukemia in, an immunophenotypic analysis, 204

Dpc4 protein, immunohistochemical labeling for Dpc4 gene product is specific marker for adenocarcinoma of pancreas and bile duct, 831

Drug interference, positive and negative in vitro interference in serum digoxin measurement by Chinese medicine Dan Shen, elimination of interference by monitoring free digoxin concentration, 403

Duodenum, morphologic features suggestive of gluten sensitivity in architecturally normal biopsy specimens of, 7, 63

Dysplasia, collagenous gastritis, long-term follow-up with the development of endocrine cell hyperplasia, intestinal metaplasia, and epithelial changes indeterminate for, 753

Dyspoiesis, hematopoietic, and bone marrow mast cell morphologic features in systemic mast cell disease, 177

E6 prototype and variants, human papillomavirus-16 E6 variants in cervical squamous intraepithelial lesions from HIV-negative and HIV-positive women, 143

#### Electrophoresis

high-resolution capillary, novel four-color PCR assay to assess T-cell receptor gamma gene rearrangement in lymphoproliferative lesions, 17

serum protein electrophoresis, narrative reports for, generation of, \$136

temporal temperature gradient gel electrophoresis, for clonal Tcell receptor gamma gene rearrangement detection, 527

Emerging infectious diseases, Mycobacterium fortuitum infections, clinical and pathological features of, an emerging pathogen in patients with AIDS, 225

Enzymatic amplification staining, high resolution immunophenotypic analysis of chronic lymphocytic leukemia by, 429

Enzyme-linked immunosorbent assay, oxidized low-density lipoprotein evaluated by, 760

Eosinophils, portal tract, and hepatocyte cytokeratin 7 immunoreactivity helps distinguish early-stage, mildly active primary biliary cirrhosis and autoimmune hepatitis, 846

Epstein-Barr virus, hepatosplenic gamma/delta T-cell lymphoma, in immunocompromised patients, report of two cases and review of the literature, 41

Equipoise, and error in anatomic pathology, \$34

Erythema nodosum, nodular cutaneous lesions of Behçet syndrome compared with, 341

Extracellular matrix, cell biology and matrix biochemistry of chondromyxoid fibroma, 271

Fasciitis, nodular, second opinions in soft tissue pathology, analysis of problem-prone diagnostic situations, 473

Fatty acid synthase, and human erythrocyte glucose transporter (GLUT1), immunohistochemical expression of, in infiltrating breast carcinomas and adjacent typical/atypical hyperplastic or normal breast tissue, 129

Fibrinolysis, characteristics of human prostate mast cells, and their increase in periprostatic vein thrombosis, 97

Fibroma, chondromyxoid, cell biology and matrix biochemistry of, 271

autoimmune myelofibrosis, pathology of, a report of three cases and a review of the literature, 211

histologic features of the liver in insulin resistance-associated iron overload, 263

Filtration, cytomegalovirus infectivity in whole blood following, 52 Fine-needle aspiration biopsy, of thyroid gland, receiver operator curve analysis for measuring accuracy of, 477

Flk-1/KDR, microvessel density, vascular endothelial growth factor and its receptors Flt-1 and, in hepatocellular carcinoma,

#### Flow cytometry

sts

in automated quantitation of hemoglobin-based blood substitutes in whole blood samples, 913

CD23 determination by, value in differentiating mantle cell lymphoma from chronic lymphocytic leukemia/small lymphocytic lymphoma, 893

immunophenotyping by

B-cell chronic lymphocytic leukemia, laboratory, morphologic, and immunophenotypic correlates of surface immunoglobulin heavy chain isotype expression in, 905

chronic lymphocytic leukemia, high resolution analysis of, by enzymatic amplification staining, 429

chronic lymphocytic leukemia, typical and atypical as differing clinically and immunophenotypically, 655

large B-cell lymphomas, flow cytometric pitfalls and pathologic correlation, 191

of peripheral T-cell neoplasms, 512

transient myeloproliferative disorder and acute myeloid leukemia in Down syndrome, 204

quantitative, surface CD20 expression on circulating lymphocytes compared with bone marrow and lymph nodes in Bcell chronic lymphocytic leukemia, 437

safely reducing manual urine microscopy analyses by combining urine flow cytometer and strip results, 872

Flt-1, microvessel density, vascular endothelial growth factor and its receptors Flk-1/KDR and, in hepatocellular carcinoma, 838

Fluorescence in situ hybridization chronic lymphocytic leukemia, typical and atypical as differing clinically and immunophenotypically, 655

HER2/neu protein status in breast cancer

assessment of, Automated Cellular Imaging System (ACIS)assisted quantitation of immunohistochemical assay achieves high accuracy in comparison with, 495 current status of testing for, 806

HER2 protein expression and gene amplification in androgenindependent prostate cancer, 234

multiprobe, for enhanced detection of bladder cancer in voided urine specimens and bladder washings, 79

Fluorescence polarization immunoassay, positive and negative in vitro interference in serum digoxin measurement by Chinese medicine Dan Shen, elimination of interference by monitoring free digoxin concentration, 403

Fluorescent treponemal antibody absorption test, passive particle agglutination test compared with, 581

Fluorouracil, p53 nuclear accumulation and multiploidy are adverse prognostic factors in surgically resected stage II cancers independent of fluorouracil-based adjuvant therapy, 360

Formalin fixation, chemical typing of amyloid protein contained in formalin-fixed paraffin-embedded biopsy specimens, 135

Frozen section service, remote, robotic telepathology, for intraoperative remote diagnosis using a still-imaging system, 744

Fundic gland, proton pump inhibitor therapy not inducing polyps

Gastritis, collagenous, long-term follow-up with the development of endocrine cell hyperplasia, intestinal metaplasia, and epithelial changes indeterminate for dysplasia, 753

Gel electrophoresis, temporal temperature gradient, for clonal T-cell receptor gamma gene rearrangement detection, 527

Gene amplification, and HER2 protein expression in androgenindependent prostate cancer, 234

Gluten, morphologic features suggestive of gluten sensitivity in architecturally normal duodenal biopsy specimens, 7, 63 Gold standard, and error in anatomic pathology, S34

Gram-negative bacterium, pulmonary granuloma caused by Pseudomonas andersonii sp nov, 347

Granulomas, pulmonary, *Pseudomonas andersonii* as cause of, 347 Gross examination, pathologists' assistants in, a measurement of

performance of, 816

Gynecologic cytology. See also Papanicolaou smear

factors that influence the ASCUS/SIL ratio of pathologists, analysis of, 331

qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the ASCUS LSIL Triage Study, 386

### H

Hantavirus cardiopulmonary syndrome, rapid presumptive diagnosis of, by peripheral blood smear review, 665

Helicobacter pylori, proton pump inhibitor therapy not inducing fundic gland polyps, 716

Hemangiopericytoma, juxtaglomerular cell tumor compared with, 854 Hemochromatosis, genetic

insulin resistance–associated iron overload compared with, 263 primary liver carcinoma in, as revealing broad histologic spectrum, 738

Hemoconcentration, in hantavirus cardiopulmonary syndrome, 665 Hemoglobin

automated quantitation of hemoglobin-based blood substitutes in whole blood samples, 913

narrative reports for, generation of, S134

Hepatitis, autoimmune, portal tract eosinophils and hepatocyte cytokeratin 7 immunoreactivity helps distinguish earlystage, mildly active primary biliary cirrhosis and, 846

Hepatitis B virus, versus noninfectious serious hazards of transfusion, 803

Hepatitis C virus, versus noninfectious serious hazards of transfusion, 802

Hepatocholangiocarcinoma, in genetic hemochromatosis, 738 Hepatosplenic gamma/delta T-cell lymphoma

in bone marrow, a sinusoidal neoplasm with blastic cytologic features, 410

in immunocompromised patients, report of two cases and review of the literature,  $41\,$ 

HER2/neu protein

in breast cancer, assessment of status of, Automated Cellular Imaging System (ACIS)-assisted quantitation of immunohistochemical assay achieves high accuracy in comparison with fluorescence in situ hybridization assay as the standard, 495

expression and gene amplification, in androgen-independent prostate cancer, 234

testing for, current status of, 806

Heuristics, in diagnostic decision-making in anatomic pathology, S21

Hindsight, in error identification in anatomic pathology, S34
Histiocytes, lymphocytic and histiocytic cells in nodular lymphocyte predominant Hodgkin disease and large cell lymphoma, 506

Histopathology, nodular cutaneous lesions of Behçet syndrome, clinicopathologic evaluation of, 341 Hodgkin disease

and lymphoma transformation, 812

lymphoplasmacytic lymphoma/Waldenström macroglobulinemia associated with, a report of two cases, 34

nodular lymphocyte predominant, tumor cells of, as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by single cell analysis, 506

Homocysteine, and cysteine, in venous and arterial thrombotic disease, 56

Human erythrocyte glucose transporter (GLUT1), and fatty acid synthase, immunohistochemical expression of, in infiltrating breast carcinomas and adjacent typical/atypical hyperplastic or normal breast tissue, 129

Human herpesvirus 6, latent, in tonsillar lymphoid tissue, prevalence and cellular reservoir of, 648

Human immunodeficiency virus infection

HIV transmissions from a window-period platelet donation, 562 human papillomavirus-16 E6 variants in cervical squamous intraepithelial lesions from HIV-negative and HIV-positive women, 143

Mycobacterium fortuitum infections, clinical and pathological features of, an emerging pathogen in patients with, 225 versus noninfectious serious hazards of transfusion, 802 proteasome inhibitors in treatment of, 637

Human papillomavirus

human papillomavirus-16 E6 variants in cervical squamous intraepithelial lesions from HIV-negative and HIV-positive women, 143

and qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the ASCUS LSIL Triage Study, 386

Hyperhomocysteinemia, cysteine and homocysteine, in venous and arterial thrombotic disease, 56

Hyperplasia

atypical ductal

in breast core needle biopsies, correlation of size of lesion, complete removal of lesion, and incidence of carcinoma in follow-up biopsies, 92

improved reporting methods for atypia and, in breast core needle biopsy specimens, potential for interlaboratory comparisons, 87

collagenous gastritis, long-term follow-up with the development of intestinal metaplasia, epithelial changes indeterminate for dysplasia, and endocrine cell, 753

of mantle/marginal zone B cells with clear cytoplasm in peripheral lymph nodes, a clinicopathologic study of 35 cases, 550

Hyperviscosity syndrome, and Waldenström macroglobulinemia, as caused by extranodal marginal zone B-cell lymphoma, 683 Hypothesis, in diagnostic decision-making in anatomic pathology,

Image analysis, HER2/neu protein status in breast cancer, assessment of, Automated Cellular Imaging System (ACIS)-assisted quantitation of immunohistochemical assay achieves high accuracy in comparison with fluorescence in situ hybridization assay as the standard, 495

Immunoblasts, in hantavirus cardiopulmonary syndrome, 665 Immunocompromised patients, hepatosplenic gamma/delta T-cell lymphoma in, report of two cases and review of the literature,

Immunocytochemistry, differential diagnosis of adenocarcinoma and reactive mesothelial cells in fluid cytology, use of panel of markers for, 709

Immunoglobulin heavy chain gene, nodular lymphocyte predominant Hodgkin disease, tumor cells of, as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by single cell analysis, 506

Immunoglobulin heavy chains, surface, isotype expression in B-cell chronic lymphocytic leukemia, laboratory, morphologic, and immunophenotypic correlates of, 905

Immunoglobulin variable region gene, absence of somatic hypermutation of, in precursor B-lymphoblastic lymphoma, a study of four cases in childhood and adolescence, 673

Immunohistochemistry

CD44 standard form expression, decreased, correlates with prognostic variables in ovarian carcinomas, 122

clear cell odontogenic carcinoma, report of two cases and review of the literature, 107

cyclin D1 overexpression in multiple myeloma, evaluation by,

cytokeratin 19 immunoreactivity in diagnosis of papillary thyroid carcinoma, 696

HER2/neu protein status in breast cancer

assessment of, Automated Cellular Imaging System (ACIS)assisted quantitation of immunohistochemical assay achieves high accuracy in comparison with fluorescence in situ hybridization assay as the standard, 495 current status of testing for, 806

human erythrocyte glucose transporter and fatty acid synthase expression, in infiltrating breast carcinomas and adjacent typical/atypical hyperplastic or normal breast tissue, 129

human herpesvirus 6 in tonsillar lymphoid tissue detected by, 648 juxtaglomerular cell tumor of kidney, a clinicopathologic study of four cases and review of the literature, 854

labeling for Dpc4 gene product is specific marker for adenocarcinoma in biopsy specimens of pancreas and bile duct, 831 in mesothelioma diagnosis, a study of thirteen antibodies, 253

p63 and cytokeratin 5/6 as markers for differential diagnosis of poorly differentiated and undifferentiated carcinoma, 823

reduced number of CD1a+ cells in cutaneous B-cell lymphoma, 72 surfactant protein A expression in human normal and neoplastic breast epithelium, 721

vascular endothelial growth factor and vascular endothelial growth factor receptor fetal liver kinase-1 expression, in benign, premalignant, and malignant prostate tissue, 115

Waldenström macroglobulinemia/lymphoplasmacytic lymphoma associated with Hodgkin disease, a report of two cases, 34

Immunophenotyping

ıt

CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically diverse, 168

by flow cytometry

chronic lymphocytic leukemia, high resolution analysis of, by enzymatic amplification staining, 429

chronic lymphocytic leukemia, typical and atypical as differing clinically and immunophenotypically, 655

laboratory, morphologic, and immunophenotypic correlates of surface immunoglobulin heavy chain isotype expression in B-cell chronic lymphocytic leukemia, 905

large B-cell lymphomas, flow cytometric pitfalls and pathologic correlation, 191

of peripheral T-cell neoplasms, 512

transient myeloproliferative disorder and acute myeloid leukemia in Down syndrome, 204

hepatosplenic gamma/delta T-cell lymphoma in bone marrow, a sinusoidal neoplasm with blastic cytologic features, 410

Waldenström macroglobulinemia, development of diagnostic criteria and identification of prognostic factors, 420

Implicit knowledge, in diagnostic decision-making in anatomic pathology, \$21

Infectious diseases, Mycobacterium fortuitum infections, clinical and pathological features of, an emerging pathogen in patients with AIDS, 225

Inflammation

and atherosclerosis, value of high-sensitivity C-reactive protein assay as risk marker, \$108

proteasome inhibitors for treatment of, 637

Influenza viruses, Prodesse Hexaplex multiplex PCR assay for direct detection of, in clinical specimens, evaluation of the, 218

Information for Authors, 149

In Memoriam

Vernie A. Stembridge, MD, 151

In situ hybridization

amplified, with peptide nucleic acid probes, for differentiation of Mycobacterium tuberculosis complex and nontuberculous Mycobacterium species, on formalin-fixed, paraffinembedded archival biopsy and autopsy samples, 770

cyclin D1 overexpression in multiple myeloma, evaluation by, 535 human herpesvirus 6 in tonsillar lymphoid tissue detected by, 648 Insulin, insulin resistance-associated iron overload, histologic features of the liver in, a study of 139 patients, 263

International Association for the Study of Lung Cancer, diagnostic criteria for neuroendocrine neoplasms of the lung, 466

Intestine, large, large colorectal adenomas, an approach to pathologic evaluation, 336

Iron overload, insulin resistance-associated, histologic features of the liver in, a study of 139 patients, 263

Isochromosome 7q, hepatosplenic gamma/delta T-cell lymphoma, in immunocompromised patients, report of two cases and review of the literature, 41

Isoenzymes, patterns of protein kinase C expression in transitional cell carcinoma of the bladder, relation to degree of malignancy, 377

Juxtaglomerular cell tumor, a clinicopathologic study of four cases and review of the literature, 854

Kidney

allograft, polyomavirus strains isolated from needle biopsy specimens of recipients of, molecular characterization and sequence analysis of, 489

hepatosplenic gamma/delta T-cell lymphoma, in immunocompromised patients, report of two cases and review of the literature, 41

juxtaglomerular cell tumor of, a clinicopathologic study of four cases and review of the literature. 854

Wilms tumor, serum creatine kinase levels parallel the clinical course for rhabdomyomatous, 354

1

Laboratory information systems, and narrative interpretations for clinical laboratory evaluations, \$123

Laboratory medicine

narrative interpretations for clinical laboratory evaluations, \$123 narrative interpretations in, generation of, a description of service-specific sign-out rounds, \$133

regulations regarding reflexive testing and narrative interpretations in, \$129

Laboratory services utilization, requisition design's impact on, 879 Laboratory tests

diagnostic accuracy of, meta-analysis of, S47

narrative interpretations, generation of, a description of servicespecific sign-out rounds, \$133

narrative interpretations for clinical laboratory evaluations, \$123 regulations regarding reflexive testing and narrative interpretations in, \$129

Lactoferrin, plasma total transcobalamin I, ethnic/racial patterns and comparison with, 576

Lansoprazole, fundic gland polyps not induced by, 716

Large cell carcinoma, morphometry confirms presence of considerable nuclear size overlap between "small cells" and "large cells" in high-grade pulmonary neuroendocrine neoplasms, 466

Leukemia

acute lymphoblastic, myeloperoxidase immunoreactivity in adult 25

acute myeloid, and transient myeloproliferative disorder in Down syndrome, an immunophenotypic analysis, 204

B-cell chronic lymphocytic

CD20, surface, higher levels of expression of, on circulating lymphocytes compared with bone marrow and lymph nodes, 437

surface immunoglobulin heavy chain isotype expression in, laboratory, morphologic, and immunophenotypic correlates of, 905

CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically diverse, 168

chronic lymphocytic

CD23 determination by flow cytometry, value in differentiating mantle cell lymphoma from chronic lymphocytic leukemia/small lymphocytic lymphoma, 893

enzymatic amplification staining for high resolution immunophenotypic analysis of, 429

and lymphoma transformation, 811

typical and atypical as differing clinically and immunophenotypically, 655

and mantle cell lymphoma, cytogenetic findings in, cases with a high level of peripheral blood involvement have distinct pattern of abnormalities, 886 Leukocyte reduction, by filtration, cytomegalovirus infectivity in whole blood following, 52

Liability

and error in anatomic pathology, \$34

plaintiff's attorney's perspective in dissembling art of medicine as it relates to interpretation and management of cervical

Light scatter, in automated quantitation of hemoglobin-based blood substitutes in whole blood samples, 913

Lipoprotein, oxidized low-density, and autoimmune antibodies in patients with antiphospholipid syndrome with a history of thrombosis, 760

Liver

hepatocellular carcinoma, microvessel density, vascular endothelial growth factor and its receptors Flt-1 and Flk-1/KDR in, 838

hepatosplenic gamma/delta T-cell lymphoma

in bone marrow, a sinusoidal neoplasm with blastic cytologic features, 410

in immunocompromised patients, report of two cases and review of the literature, 41

in insulin resistance–associated iron overload, histologic features of, a study of 139 patients, 263

portal tract eosinophils and hepatocyte cytokeratin 7 immunoreactivity helps distinguish early-stage, mildly active primary biliary cirrhosis and autoimmune hepatitis, 846

primary carcinoma of, in genetic hemochromatosis, as revealing broad histologic spectrum, 738

Lung. See also Lung cancer

granuloma caused by Pseudomonas andersonii sp nov, 347

Lung cancer

adenocarcinoma of lung origin, thyroid transcription factor-1, in cytologic preparations, as marker for metastatic, value of, 483

high-grade pulmonary neuroendocrine neoplasms, morphometry confirms presence of considerable nuclear size overlap between "small cells" and "large cells" in, 466

mucinous and nonmucinous bronchioloalveolar adenocarcinomas have distinct staining patterns with thyroid transcription factor and cytokeratin 20 antibodies, 319

neuroendocrine neoplasms, \$65

Lupus erythematosus, systemic, autoimmune myelofibrosis associated with, 211

Lymphadenitis, cervical, and Mycobacterium fortuitum infections in patients with AIDS, 225

Lymphadenopathy, Whipple disease manifesting as, primary diagnosis of, using polymerase chain reaction for detection of *Tropheryma whippelii*, 898

Lymph nodes

CD20, surface, higher levels of expression of, on circulating lymphocytes compared with bone marrow and, in B-cell chronic lymphocytic leukemia, 437

mantle cell lymphoma, cytogenetic findings in, cases with a high level of peripheral blood involvement have distinct pattern of abnormalities, 886

peripheral, hyperplasia of mantle/marginal zone B cells with clear cytoplasm in, a clinicopathologic study of 35 cases, 550

Waldenström macroglobulinemia/lymphoplasmacytic lymphoma associated with Hodgkin disease, 34 Whipple disease manifesting as lymphadenopathy, primary diagnosis of, using polymerase chain reaction for detection of Tropheryma whippelii, 898

Lymphocytes

intraepithelial, morphologic features suggestive of gluten sensitivity in architecturally normal duodenal biopsy specimens.

lymphocytic and histiocytic cells in nodular lymphocyte predominant Hodgkin disease and large cell lymphoma, 506

Lymphoid tissue, latent human herpesvirus 6 in tonsillar, prevalence and cellular reservoir of, 648

B-cell, Waldenström macroglobulinemia as caused by extranodal marginal zone, 683

CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically diverse, 168

classification of, \$16

cutaneous B-cell, reduced number of CD1a+ cells in, 72

diffuse large B-cell, clinicopathologic analysis of CD10+ and CD10-, identification of a high-risk subset with coexpression of CD10 and bcl-2, 183

hepatosplenic gamma/delta T-cell

in bone marrow, a sinusoidal neoplasm with blastic cytologic features, 410

in immunocompromised patients, report of two cases and review of the literature, 41

large B-cell, immunophenotyping, flow cytometric pitfalls and pathologic correlation, 191

large cell, tumor cells of nodular lymphocyte predominant Hodgkin disease occurring in the same individual as clonally related to the, direct demonstration by single cell analysis, 506

lymphoblastic, terminal deoxynucleotidyl transferase-positive cells in human tonsils, 12

lymphoplasmacytic

cytogenetic findings in lymphoplasmacytic

lymphoma/Waldenström macroglobulinemia, chromosomal abnormalities are associated with the polymorphous subtype and an aggressive clinical course, 543

and Waldenström macroglobulinemia, associated with Hodgkin disease, a report of two cases, 34

and Waldenström macroglobulinemia, classification of, 799 mantle cell

CD23 determination by flow cytometry, value in differentiating from chronic lymphocytic leukemia/small lymphocytic lymphoma, 893

cytogenetic findings in, cases with a high level of peripheral blood involvement have distinct pattern of abnormalities, 886

non-Hodgkin, hyperplasia of mantle/marginal zone B cells with clear cytoplasm in peripheral lymph nodes, a clinicopathologic study of 35 cases, 550

precursor B-lymphoblastic, immunoglobulin heavy chain variable region genes in, absence of somatic hypermutation of. a study of four cases in childhood and adolescence, 673

gists

clonal T-cell receptor gamma gene rearrangement detection by polymerase chain reaction and temporal temperature gradient gel electrophoresis, 527

novel four-color PCR assay to assess T-cell receptor gamma gene rearrangement in lymphoproliferative lesions, 17

transformation of, genetic relatedness, stealth lymphomas, and the final frontier, 811

M

Macroglobulinemia, Waldenström

cytogenetic findings in lymphoplasmacytic

lymphoma/Waldenström macroglobulinemia, chromosomal abnormalities are associated with the polymorphous subtype and an aggressive clinical course, 543

development of diagnostic criteria and identification of prognostic factors, 420

and lymphoplasmacytic lymphoma associated with Hodgkin disease, a report of two cases, 34

Mammotomy

atypical ductal hyperplasia in breast core needle biopsies, correlation of size of lesion, complete removal of lesion, and incidence of carcinoma in follow-up biopsies, 92

improved reporting methods for atypia and atypical ductal hyperplasia in breast core needle biopsy specimens, potential for interlaboratory comparisons, 87

Mantle zone, hyperplasia of mantle/marginal zone B cells with clear cytoplasm in peripheral lymph nodes, a clinicopathologic study of 35 cases, 550

Marginal zone

hyperplasia of mantle/marginal zone B cells with clear cytoplasm in peripheral lymph nodes, a clinicopathologic study of 35 cases, 550

Waldenström macroglobulinemia as caused by extranodal marginal zone B-cell lymphoma, a report of six cases, 683

Marrow. See Bone marrow

Mast cell disease, systemic, bone marrow mast cell morphologic features and hematopoietic dyspoiesis in, 177

Mast cells

bone marrow mast cell morphologic features and hematopoietic dyspoiesis in systemic mast cell disease, 177

in human prostate, and their increase in periprostatic vein thrombosis, 97

Mastocytosis, bone marrow mast cell morphologic features and hematopoietic dyspoiesis in systemic mast cell disease, 177

Medical error. See also Diagnostic error

and narrative interpretations for clinical laboratory evaluations, S125

Medical necessity, and requisition design's impact on laboratory utilization, 879

Meeting Minutes

ACLPS annual meeting, 943

Melanoma, desmoplastic-neurotropic, second opinions in soft tissue pathology, analysis of problem-prone diagnostic situations,

Mesothelioma, malignant

immunohistochemical analysis still has limited role in diagnosis of, a study of thirteen antibodies, 253

thyroid transcription factor-1 for discriminating between pulmonary adenocarcinoma and, 483

Mesothelium, differential diagnosis of adenocarcinoma and reactive mesothelial cells, in fluid cytology, use of panel of markers

Meta-analysis, in pathology practice, S47

Metaplasia, collagenous gastritis, long-term follow-up with the development of endocrine cell hyperplasia, epithelial changes indeterminate for dysplasia, and intestinal, 753

Methionine, cysteine and homocysteine in venous and arterial thrombotic disease, 56

Microhemagglutination assay, passive particle agglutination test compared with, 581

Micromanipulation, nodular lymphocyte predominant Hodgkin disease, tumor cells of, as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by single cell analysis, 506

Microparticle enzyme immunoassay, positive and negative in vitro interference in serum digoxin measurement by Chinese medicine Dan Shen, elimination of interference by monitoring free digoxin concentration, 403

Microscopy, manual urine, safely reducing by combining urine flow cytometer and strip results, 872

Microvessel density, and vascular endothelial growth factor and its receptors Flt-1 and Flk-1/KDR in hepatocellular carcinoma, 838

Mitochondria, diagnostic yield of muscle biopsy in patients with clinical evidence of mitochondrial cytopathy, 326

Mitosis, and regulators of cell cycle and apoptosis, as determinants of response to neoadjuvant chemotherapy and disease outcome in cervical carcinoma, 729

Molecular diagnostics, narrative reports for, generation of, S138 Morphology

bone marrow mast cell morphologic features and hematopoietic dyspoiesis in systemic mast cell disease, 177

CD56+/CD4+ lymphomas and leukemias are morphologically, immunophenotypically, cytogenetically, and clinically diverse, 168

Morphometry, considerable nuclear size overlap between "small cells" and "large cells" in high-grade pulmonary neuroen-docrine neoplasms confirmed by, 466

Mucicarmine, in differential diagnosis of adenocarcinoma and reactive mesothelial cells, 709

Mucosa-associated lymphoid tissue, and Waldenström macroglobulinemia, 683

Multimers, quantification and facilitated comparison of von Willebrand factor multimer patterns, by densitometry, 567

Multiploidy, and p53 nuclear accumulation are adverse prognostic factors in surgically resected stage II colorectal cancers independent of fluorouracil-based adjuvant therapy, 360

Muscle, diagnostic yield of biopsy of, in patients with clinical evidence of mitochondrial cytopathy, 326

Mycobacteria, nontuberculous

amplified in situ hybridization with peptide nucleic acid probes for differentiation of *Mycobacterium tuberculosis* complex and, on formalin-fixed, paraffin-embedded archival biopsy and autopsy samples, 770

Mycobacterium fortuitum infections, clinical and pathological features of, an emerging pathogen in patients with AIDS, 225

Mycobacterium fortuitum, infections, clinical and pathological features of, an emerging pathogen in patients with AIDS, 225

Mycobacterium tuberculosis, amplified in situ hybridization with peptide nucleic acid probes for differentiation of nontuberculous Mycobacterium species and, on formalin-fixed, paraffin-embedded archival biopsy and autopsy samples, 770 Myelocytosis, in hantavirus cardiopulmonary syndrome, 665 Myelofibrosis, autoimmune, pathology of, a report of three cases and a review of the literature, 211

Myeloma, multiple, cyclin D1 overexpression in, a morphologic, immunohistochemical, and in situ hybridization study of 71 paraffin-embedded bone marrow biopsy specimens, 535

Myeloperoxidase, immunoreactivity in adult acute lymphoblastic leukemia. 25

Myeloproliferative disorders, transient, and acute myeloid leukemia in Down syndrome, an immunophenotypic analysis, 204

Myocardial infarction, clinical significance of low-positive troponin I, by AxSYM and ACS:180, 396

Myometrial fibers, in placental basal plate, as confirming but not necessarily indicating clinical placenta accreta, 703

Myopathy, diagnostic yield of muscle biopsy in patients with clinical evidence of, 326

## N

Narrative interpretations

for clinical laboratory evaluations, \$123

generation of, a description of service-specific sign-out rounds, \$133

regulations regarding, \$129

Needle biopsy. See Core biopsy; Fine-needle aspiration biopsy

Neoplasms. See also sites and types by name

digital versus analog approaches to diagnosis of, 463

Nephroblastoma. See Wilms tumor

Neuroblastoma, of the lung, primary, S86

Neuroendocrine neoplasms

collagenous gastritis, long-term follow-up with the development of endocrine cell hyperplasia, intestinal metaplasia, and epithelial changes indeterminate for dysplasia, 753

high-grade, morphometry confirms presence of considerable nuclear size overlap between "small cells" and "large cells" in, 466

News and Notices, 154, 299, 450, 619, 785

Nodular lesions, of Behçet syndrome, clinicopathologic evaluation of, 341

Noninfectious serious hazards of transfusion, 802

Nuclear factor kappa B

in atherosclerosis and cancer, \$101

proteasome inhibitors affecting, 637

Nucleic acid testing, and HIV transmissions from a window-period platelet donation, 562

#### n

Odontogenic neoplasms, clear cells in, report of two cases and review of the literature, 107

Omeprazole, fundic gland polyps not induced by, 716 Ovarian cancer

carcinoma, CD44 standard form expression, decreased, correlates with prognostic variables in, 122

WT1 as integral component of antibody panel to distinguish pancreaticobiliary and some ovarian epithelial neoplasms, 246 Oxidative stress, in atherosclerosis and cancer, S98 P21 protein, and p53, expression in surgical management of lingual squamous cell carcinoma, clinicopathologic significance of, 240

P53 protein

nuclear accumulation and multiploidy are adverse prognostic factors in surgically resected stage II colorectal cancers independent of fluorouracil-based adjuvant therapy, 360

and p21, expression in surgical management of lingual squamous cell carcinoma, clinicopathologic significance of,

P63 protein, and cytokeratin 5/6 as immunohistochemical markers for differential diagnosis of poorly differentiated and undifferentiated carcinoma, 823

Pancreas

nt

ole

n

bd

an-

ogists

adenocarcinoma of, immunohistochemical labeling for Dpc4 gene product is specific marker for, 831

WT1 as integral component of antibody panel to distinguish pancreaticobiliary and some ovarian epithelial neoplasms,

Panels, and requisition design's impact on laboratory utilization, 879

Pantoprazole, fundic gland polyps not induced by, 716 Papanicolaou smear

atypical squamous cells of undetermined significance subcategorization, accuracy analysis of, using receiver operating curves and implications for the ASCUS/squamous intraepithelial lesion ratio, 692

diagnosed as atypical squamous cells of undetermined significance, subcategorization of, 631

factors that influence the ASCUS/SIL ratio of pathologists, analysis of, 331

plaintiff's attorney's perspective in dissembling art of medicine as it relates to interpretation and management of, S116

qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the ASCUS LSIL Triage Study, 386

Paraganglioma, primary intrapulmonary, S84

Parainfluenza viruses, Prodesse Hexaplex multiplex PCR assay for direct detection of, in clinical specimens, evaluation of the,

Partial thromboplastin time, and narrative interpretations for clinical laboratory evaluations, S123

Passive particle agglutination test, in syphilis serodiagnosis and follow-up, evaluation of the, 581

Pathologists' assistants, a measurement of performance of, 816 Pathology. See also Anatomic pathology; Surgical pathology meta-analysis in, S47

narrative interpretations, generation of, a description of servicespecific sign-out rounds, \$133

narrative interpretations for clinical laboratory evaluations, \$123 regulations regarding reflexive testing and narrative interpretations in, S129

Pattern recognition, in diagnostic decision-making in anatomic pathology, S21

Peptide nucleic acid probes, amplified in situ hybridization with, for differentiation of Mycobacterium tuberculosis complex and nontuberculous Mycobacterium species, on formalin-fixed, paraffin-embedded archival biopsy and autopsy samples,

Performance evaluation, of pathologists' assistants, 816

Peripheral T-cell neoplasms, immunophenotypic analysis of, a multiparameter flow cytometric approach to, 512

Periprostatic vein thrombosis, characteristics of human prostate mast cells, and their increase in, 97

Placenta, myometrial fibers in basal plate, as confirming but not necessarily indicating clinical placenta accreta, 703

Platelets, HIV transmissions from a window-period platelet donation, 562

Ploidy, p53 nuclear accumulation and multiploidy are adverse prognostic factors in surgically resected stage II colorectal cancers independent of fluorouracil-based adjuvant therapy,

Polymerase chain reaction

chronic lymphocytic leukemia, typical and atypical as differing clinically and immunophenotypically, 655

for clonal T-cell receptor gamma gene rearrangement detection, 527

four-color, novel to assess T-cell receptor gamma gene rearrangement in lymphoproliferative lesions, 17

human herpesvirus 6 in tonsillar lymphoid tissue detected by,

and lymphoma transformation, 811

multiplex, Prodesse Hexaplex for direct detection of seven respiratory viruses in clinical specimens, evaluation of the, 218

nested, of polyomavirus strains isolated from needle biopsy specimens of kidney allograft recipients, 489

nodular lymphocyte predominant Hodgkin disease, tumor cells of, as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by single cell analysis, 506

nucleic acid testing, HIV transmissions from a window-period platelet donation, 562

surfactant protein A expression in human normal and neoplastic breast epithelium, 721

for Tropheryma whippelii detection, in primary diagnosis of Whipple disease manifesting as lymphadenopathy, 898

Polyomavirus, from needle biopsy specimens of kidney allograft recipients, molecular characterization and sequence analysis of, 489

Polyps

colorectal, large colorectal adenomas, an approach to pathologic evaluation, 336

in fundic gland, proton pump inhibitor therapy not inducing, 716 Posttransplant lymphoproliferative disorder, hepatosplenic gamma/delta T-cell lymphoma, in immunocompromised patients, report of two cases and review of the literature, 41

Precision, diagnostic accuracy and classification in anatomic pathology, \$5

Primitive neuroectodermal tumor, of the lung, primary, \$86 Prostate, characterization of mast cells in, and their increase in periprostatic vein thrombosis, 97

Prostate cancer

androgen-independent, HER2/neu protein expression and gene amplification in, 234

relative importance of anatomic and PSA factors to outcomes after radical prostatectomy for, 864

vascular endothelial growth factor and vascular endothelial growth factor receptor fetal liver kinase-1 expression, in benign, premalignant, and malignant prostate tissue, 115

Prostatectomy, radical, relative importance of anatomic and PSA factors to outcomes after, 864

Prostate-specific antigen, relative importance of anatomic and PSA factors to outcomes after radical prostatectomy for prostate cancer, 864

Proteasome

in atherosclerosis and cancer, S101

as new target for novel drug therapies, 637

Proteasome inhibitors, 637

Protein kinase C, isoenzyme expression in transitional cell carcinoma of the bladder, relation to degree of malignancy, 377

Proton pump inhibitors, fundic gland polyps not induced by therapeutic use of, 716

PS-341

in cancer treatment, \$101

therapeutic effects of, 637

PS-519, therapeutic effects of, 637

Pseudolymphoma, reduced number of CD1a+ cells in cutaneous Bcell lymphoma, 72

Pseudomonas andersonii, pulmonary granuloma caused by, 347

Psoriasis, proteasome inhibitors for treatment of, 637

Psychiatry, classification in, S12

## 0

Quality control

factors that influence the ASCUS/SIL ratio of pathologists, analysis of, 331

improved reporting methods for atypia and atypical ductal hyperplasia in breast core needle biopsy specimens, potential for interlaboratory comparisons, 87

pathologists' assistants, a measurement of performance of, 816 Quality improvement, timeliness as quality attribute of laboratory

results, 311

Quantitation, automated, of hemoglobin-based blood substitutes in whole blood samples, 913

### R

Race, plasma total transcobalamin I, ethnic/racial patterns and comparison with lactoferrin, 576

Randomized controlled trials, meta-analysis of, S47

Receiver operator curve analysis

accuracy analysis of Papanicolaou smears using, and implications for the ASCUS/squamous intraepithelial lesion ratio, 692 accuracy of thyroid fine-needle aspiration using, 477

Red blood cells, automated quantitation of hemoglobin-based blood substitutes in whole blood samples, 913

Reflexive testing, regulations regarding, \$129

Regulations, regarding reflexive testing and narrative interpretations in laboratory medicine, S129

Reimbursement, for narrative interpretations in laboratory medicine, \$131

Reporting

improved methods for atypia and atypical ductal hyperplasia in breast core needle biopsy specimens, potential for interlaboratory comparisons, 87

of laboratory results, timeliness as quality attribute of, 311 Requisition, design of, impact on laboratory utilization of, 879 Respiratory viruses, Prodesse Hexaplex multiplex PCR assay for direct detection of seven, in clinical specimens, evaluation of the, 218

Results reporting, timeliness as quality attribute of, 311

Rhabdomyoblast, serum creatine kinase levels parallel the clinical course for rhabdomyomatous Wilms tumor, 354

Rituximab therapy, and differential surface CD20 expression on circulating lymphocytes compared with bone marrow and lymph nodes in B-cell chronic lymphocytic leukemia, 437

## S

Sarcoma, second opinions in soft tissue pathology, analysis of problem-prone diagnostic situations, 473

Screening, for cervical cancer, effectiveness of, S116

Second opinions

and error in anatomic pathology, \$41

in soft tissue pathology, analysis of problem-prone diagnostic situations, 473

Sequence analysis

nodular lymphocyte predominant Hodgkin disease, tumor cells of as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by single cell analysis, 506

of polyomavirus strains isolated from needle biopsy specimens of kidney allograft recipients, 489

Serum protein electrophoresis, narrative reports for, generation of, \$136

Sex, plasma total transcobalamin I, ethnic/racial patterns and comparison with lactoferrin, 576

Single cell analysis, nodular lymphocyte predominant Hodgkin disease, tumor cells of as clonally related to the large cell lymphoma occurring in the same individual, direct demonstration by, 506

Sin Nombre virus, hantavirus cardiopulmonary syndrome as caused by, 665

Skin, nodular cutaneous lesions of Behçet syndrome, clinicopathologic evaluation of, 341

Skin cancer, reduced number of CD1a+ cells in cutaneous B-cell lymphoma, 72

Small cell carcinoma, morphometry confirms presence of considerable nuclear size overlap between "small cells" and "large cells" in high-grade pulmonary neuroendocrine neoplasms, 466

Soft tissue tumors, second opinions in soft tissue pathology, analysis of problem-prone diagnostic situations, 473

Somatic hypermutation, of immunoglobulin heavy chain variable region genes, absence of, in precursor B-lymphoblastic lymphoma, a study of four cases in childhood and adolescence, 673

Spleen, hepatosplenic gamma/delta T-cell lymphoma

in bone marrow, a sinusoidal neoplasm with blastic cytologic features, 410

in immunocompromised patients, report of two cases and review of the literature, 41

Sprue, morphologic features suggestive of gluten sensitivity in architecturally normal duodenal biopsy specimens, 7, 63

Squamous intraepithelial lesions

factors that influence the ASCUS/SIL ratio of pathologists, analysis of, 331

human papillomavirus-16 E6 variants in cervical, from HIVnegative and HIV-positive women, 143

qualification of ASCUS, a comparison of equivocal LSIL and equivocal HSIL cervical cytology in the ASCUS LSIL Triage Study, 386

receiver operating curves in accuracy analysis of Papanicolaou smears, and implications for the ASCUS/squamous intraepithelial lesion ratio, 692

Standardization, laboratory, von Willebrand factor multimer patterns, quantification and facilitated comparison of, by densitometry, 567

Static imaging, robotic telepathology, for intraoperative remote diagnosis using a still-imaging system, 744

Statistics, receiver operator curve analysis, accuracy of thyroid fineneedle aspiration using, 477

Steatosis, histologic features of the liver in insulin resistance-associated iron overload, a study of 139 patients, 263

Surface immunoglobulin heavy chains, isotype expression in B-cell chronic lymphocytic leukemia, laboratory, morphologic, and immunophenotypic correlates of, 905

Surfactant protein A, expression in human normal and neoplastic breast epithelium, 721

Surgical pathology

classification in, \$5

pathologists' assistants in, a measurement of performance of, 816

Syncytial viruses, respiratory, Prodesse Hexaplex multiplex PCR assay for direct detection of, in clinical specimens, evaluation of the, 218

Syphilis, passive particle agglutination test in serodiagnosis and follow-up of, evaluation of the, 581

Sysmex UF-100 flow cytometer, safely reducing manual urine microscopy analyses by combining urine flow cytometer and strip results, 872

T-cell receptor gamma/delta, hepatosplenic gamma/delta T-cell lymphoma

in bone marrow, a sinusoidal neoplasm with blastic cytologic

in immunocompromised patients, report of two cases and review of the literature, 41

T-cell receptor gamma gene rearrangement

clonal, polymerase chain reaction/temporal temperature gradient gel electrophoresis for detection of, 527

in lymphoproliferative lesions, novel four-color PCR assay to assess, 17

T cells, peripheral T-cell neoplasms, immunophenotypic analysis of, a multiparameter flow cytometric approach, 512

Telepathology, robotic, for intraoperative remote diagnosis using a still-imaging system, 744

Terminal deoxynucleotidyl transferase, human tonsils containing positive cells for, 12

Thrombocytopenia, in hantavirus cardiopulmonary syndrome, 665 Thrombophilia, cysteine and homocysteine, in venous and arterial thrombotic disease, 56

Thrombosis

cysteine and homocysteine, in venous and arterial thrombotic disease, 56

oxidized low-density lipoprotein, and autoimmune antibodies in patients with antiphospholipid syndrome with a history of,

periprostatic vein, characteristics of human prostate mast cells and their increase in, 97

Thyroid gland

fine-needle aspiration of, receiver operator curve analysis for measuring accuracy of, 477

papillary carcinoma of, cytokeratin 19 immunoreactivity in diagnosis of, 635, 696

Thyroid transcription factor-1

in cytologic preparations, as marker for metastatic adenocarcinoma of lung origin, value of, 483

mucinous and nonmucinous bronchioloalveolar adenocarcinomas have distinct staining patterns with cytokeratin 20 antibodies and, 319

Timeliness, as quality attribute of laboratory results, 311

Tongue, lingual squamous cell carcinoma, clinicopathologic significance of p53 and p21 expression in surgical management

Tonsils

latent human herpesvirus 6 in lymphoid tissue from, prevalence and cellular reservoir of, 648

terminal deoxynucleotidyl transferase-positive cells in human, 12 Toxicology, narrative reports for, generation of, \$137

Transcobalamin I, plasma total, ethnic/racial patterns and comparison with lactoferrin, 576

Transforming growth factor-beta, in atherosclerosis and cancer, S100

Transfusion

HIV transmissions from a window-period platelet donation, 562 narrative reports for, generation of, \$138 noninfectious serious hazards of, 802

Transfusion-related acute lung injury, 803

Transplantation, of kidney

hepatosplenic gamma/delta T-cell lymphoma, in immunocompromised patients, report of two cases and review of the literature, 41

polyomavirus strains isolated from needle biopsy specimens of kidney allograft recipients, molecular characterization and sequence analysis of, 489

Tropheryma whippelii, Whipple disease manifesting as lymphadenopathy, primary diagnosis of, using polymerase chain reaction for detection of, 898

Troponin I. See Cardiac troponin I

Tuberculosis, amplified in situ hybridization with peptide nucleic acid probes for differentiation of Mycobacterium tuberculosis complex and nontuberculous Mycobacterium species, on formalin-fixed, paraffin-embedded archival biopsy and autopsy samples, 770

Tumor markers

in differential diagnosis of adenocarcinoma and reactive mesothelial cells in fluid cytology, use of panel of, 709

immunohistochemical labeling for Dpc4 gene product is specific marker for adenocarcinoma of pancreas and bile duct,

serum creatine kinase levels parallel the clinical course for rhabdomyomatous Wilms tumor, 354

thyroid transcription factor-1, in cytologic preparations, as marker for metastatic adenocarcinoma of lung origin, value Tumors. See Neoplasms

Turnaround time, timeliness as quality attribute of laboratory results, 311

## U

Uncertainty, and error in anatomic pathology, \$34

Urinalysis, safely reducing manual urine microscopy analyses by combining urine flow cytometer and strip results, 872

Urine specimens, voided, multiprobe FISH for enhanced detection of bladder cancer in bladder washings and, 79

Urine strips, safely reducing manual urine microscopy analyses by combining urine flow cytometer and strip results, 872

Variation, and error in anatomic pathology, S34

Vascular endothelial growth factor

microvessel density, and its receptors Flt-1 and Flk-1/KDR in hepatocellular carcinoma, 838

and vascular endothelial growth factor receptor fetal liver kinase-1, expression in benign, premalignant, and malignant prostate tissue, 115

Vascular endothelial growth factor receptor fetal liver kinase-1, and vascular endothelial growth factor, expression in benign, premalignant, and malignant prostate tissue, 115

Villi

large colorectal adenomas, an approach to pathologic evaluation,

morphologic features suggestive of gluten sensitivity in architecturally normal duodenal biopsy specimens, 7, 63

Villin, mucinous, mucinous and nonmucinous bronchioloalveolar adenocarcinomas have distinct staining patterns with cytokeratin 20 antibodies and, 319

Viruses, respiratory, Prodesse Hexaplex multiplex PCR assay for direct detection of seven, in clinical specimens, evaluation of the, 218

Von Meyenburg complexes, in primary liver carcinoma in genetic hemochromatosis, 738

Von Willebrand factor, quantification and facilitated comparison of multimer patterns, by densitometry, 567

## W

Waldenström macroglobulinemia

as caused by extranodal marginal zone B-cell lymphoma, a report of six cases, 683

development of diagnostic criteria and identification of prognostic factors, 420

and lymphoplasmacytic lymphoma

associated with Hodgkin disease, a report of two cases, 34 classification of, 799

cytogenetic findings in, chromosomal abnormalities are associated with the polymorphous subtype and an aggressive clinical course, 543

Whipple disease, manifesting as lymphadenopathy, primary diagnosis of, using polymerase chain reaction for detection of Tropheryma whippelii, 898

Wilms tumor, serum creatine kinase levels parallel the clinical course for rhabdomyomatous, 354

Window period, HIV transmissions from a platelet donation during, 562 World Health Organization, diagnostic criteria for neuroendocrine neoplasms of the lung, 466

WT1, as integral component of antibody panel to distinguish pancreaticobiliary and some ovarian epithelial neoplasms, 246

